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GLOBAL PERSPECTIVES ON ENVIRONMENTAL JOURNALISM:

challenges, innovations, and the path
to sustainable practice



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ABSTRACT – Environmental journalism plays a vital role in informing the public about ecological sustainability, climate change, and environmental policy. This study examines the advances, challenges, and innovations in environmental journalism across diverse global settings by analyzing 668 scholarly articles from countries including the United States, Brazil, India, Spain, and Russia. Drawing on a comprehensive literature review grounded in a qualitative approach, the study identifies key concerns such as inadequate professional training, political and economic pressures, and persistent resource constraints. The results indicate a growing shift toward solutions-oriented approaches designed to strengthen public awareness and engagement, and they emphasize the value of collaboration among journalists, scientists, and local communities. Challenges nevertheless remain in balancing objectivity with advocacy and in improving formal education for future journalists. The study concludes that stronger cross-sector collaboration can support more inclusive and sustainable narratives. These findings are intended to help stakeholders develop more effective environmental journalism practices and thereby ensure accurate and credible reporting in the digital era.

Keywords: Environmental journalism. Solutions-oriented journalism. Trans journalism, immersive technology, collaboration.

PERSPECTIVAS GLOBAIS SOBRE JORNALISMO AMBIENTAL: desafios, inovações e o caminho para práticas sustentáveis

RESUMO – O jornalismo ambiental desempenha um papel crucial na informação do público sobre a sustentabilidade ecológica, as alterações climáticas e as políticas ambientais. Este estudo examina avanços, desafios e inovações no jornalismo ambiental em contextos globais, analisando 668 artigos acadêmicos de países como EUA, Brasil, Índia, Espanha e Rússia. Utilizando uma revisão abrangente da literatura com foco na investigação qualitativa, o estudo identifica questões-chave, tais como formação profissional insuficiente, pressões políticas e econômicas e restrições de recursos. Os resultados indicam uma tendência crescente para metodologias orientadas para soluções para aumentar a sensibilização e o envolvimento do público, enfatizando a importância da colaboração entre jornalistas, cientistas e comunidades locais. Persistem desafios no equilíbrio entre a objetividade e a defesa de direitos e na melhoria da educação formal para aspirantes a jornalistas. O estudo conclui que a promoção da colaboração intersetorial pode fortalecer narrativas inclusivas e sustentáveis. Estas conclusões visam apoiar as partes interessadas no desenvolvimento de práticas de jornalismo ambiental mais eficazes, garantindo reportagens precisas e credíveis na era digital.

Palavras-chave: Jornalismo ambiental. Jornalismo orientado a soluções. Jornalismo trans, tecnologia imersiva, colaboração.

PERSPECTIVAS GLOBALES DEL PERIODISMO AMBIENTAL: desafíos, innovaciones y el camino hacia prácticas sustentables

RESUMEN – El periodismo ambiental desempeña un papel crucial a la hora de informar al público sobre la sostenibilidad ecológica, el cambio climático y las políticas medioambientales. Este estudio examina avances, desafíos e innovaciones en el periodismo ambiental en contextos globales, analizando 668 artículos académicos de países como Estados Unidos, Brasil, India, España y Rusia. Utilizando una revisión exhaustiva de la literatura centrada en la investigación cualitativa, el estudio identifica cuestiones clave como la formación profesional insuficiente, las presiones políticas y económicas y las limitaciones de recursos. Los resultados indican una tendencia creciente hacia metodologías orientadas a soluciones para aumentar la conciencia y el compromiso del público, enfatizando la importancia de la colaboración entre periodistas, científicos y comunidades locales. Siguen existiendo desafíos para equilibrar la objetividad y la promoción y mejorar la educación formal de los aspirantes a periodistas. El estudio concluye que promover la colaboración intersectorial puede fortalecer narrativas inclusivas y sostenibles. Estos hallazgos tienen como objetivo ayudar a las partes interesadas a desarrollar prácticas periodísticas ambientales más efectivas, garantizando informes precisos y creíbles en la era digital.

Palabras clave: Periodismo ambiental. Periodismo orientado a soluciones. Periodismo trans, tecnología inmersiva, colaboración.

1 Introduction

Environmental journalism has emerged as a significant discipline within communication studies and contemporary journalism, particularly as global awareness of issues such as climate change, deforestation, pollution, and poverty-related policy has escalated (Friedman, 2015; Loose & Camana, 2015). Prior research has established that environmental reporting plays a crucial role in shaping public perceptions, influencing governmental policy decisions, and fostering collective action in response to environmental challenges (Forde, 2018; Vasileva, 2019). Nevertheless, the practice of environmental journalism continues to face numerous challenges, including a persistent lack of specialized training for journalists (McGaurr, 2013) and political pressures exerted by governmental entities or industrial sectors (Matsilele, 2023). Within this framework, scholarly inquiry into environmental journalism has attracted growing academic attention, particularly in efforts to understand how media organizations can enhance their effectiveness in communicating complex scientific and sociocultural information to diverse audiences (Witsen, 2018).

One of the principal obstacles in the field of environmental journalism concerns the distinction between science-oriented reporting and advocacy-oriented narratives. Previous studies indicate that many journalists grapple with a tension between upholding traditional standards of objectivity and adopting the role of advocates for environmental rights (Jones, 2021; Takahashi, 2024). Furthermore, environmental journalism often depends on authoritative sources such as governmental institutions and corporate entities, a reliance that tends to diminish its critical capacity to represent local perspectives or marginalized communities (Friedman, 2015; Loose & Belmonte, 2023). An additional challenge lies in the limited formal education available to train journalists to understand and report environmental issues with sufficient depth and accuracy (Jamil, 2023; Schmidt, 2024). This situation substantially limits the capacity of journalism to produce influential and enduring coverage.

In addition to the pressures that arise from within the field, environmental journalism faces a range of external obstacles, including increasing political polarization, growing skepticism toward scientific research, and the accelerating proliferation of disinformation

in the digital era (Smith, 2018; Yoon, 2020). Although social media has opened new channels for sharing environmental knowledge, it has simultaneously facilitated the spread of misleading and manipulative information (Chattoo, 2021). In many countries, particularly developing ones, environmental reporting remains a lower priority for mainstream media, largely because commercial demands and limited institutional support constrain their capacity to address it more fully (Matsilele, 2023; Rahman, 2020). A thorough review of the existing scholarship is therefore essential in order to clarify the prevailing patterns, emerging trends, and persistent challenges that shape the global development of environmental journalism (Kovarík, 2020).

The purpose of this study is to examine the current body of literature on environmental journalism in diverse international settings. The review identifies the key factors that shape the quality of environmental journalism, including methodological practices, approaches to information dissemination, and the ways in which these elements influence public awareness and environmental policymaking (Maduneme, 2024; Wilson, 2024). Moreover, the study explores how digital technologies, journalist training systems, and cross-sector collaboration strengthen the overall effectiveness of environmental journalism (Rochyadi-Reetz, 2021). The insights generated from this analysis are expected to yield practical recommendations for journalists, journalism educators, and policymakers who face contemporary challenges in the field (Vasileva, 2019).

Although a substantial volume of research has addressed environmental journalism, notable gaps in the literature persist and have yet to be explored comprehensively. Existing scholarship tends to focus narrowly on particular aspects, most notably the influence of social media (Yoon, 2019) or the function of journalists in environmental advocacy (Comfort, 2021; Loose & Belmonte, 2023). Nonetheless, only a limited number of studies have undertaken a holistic examination of the full trajectory of environmental journalism research across varied geographic, historical, and methodological perspectives. Another notable gap lies in the scarcity of analyses that investigate the intersections between environmental journalism and related spheres such as education, cultural contexts, and public policy.

Accordingly, this study addresses this gap by providing a comprehensive overview of the existing literature across multiple dimensions of environmental journalism. By applying literature-based analytical methods to a wide range of Scopus-indexed

journal articles and books published between 1980 and 2025, the research clarifies the major trends and challenges shaping environmental journalism in the digital era, with particular attention to solution-driven practices and their evolving advocacy functions. More specifically, the study addresses the following research questions: (1) How does the volume of research on environmental journalism skills fluctuate annually? (2) How diverse are the research methodologies employed to examine environmental journalism? (3) How effective are immersive technologies at enhancing the audience's comprehension of complex environmental issues? The outcomes are expected to provide meaningful insights for journalists and policymakers and thereby to guide the development of more inclusive and effective approaches to environmental reporting. This literature review is of considerable importance for the advancement of environmental journalism, especially in light of the ongoing shifts brought about by digital media and the increasing societal need for transparent, evidence-based environmental understanding (Hui, 2023).

2 Methodology

This study employs a literature review framework in order to provide a comprehensive understanding of the multifaceted challenges that characterize environmental journalism across varied geographical and sociocultural contexts (Snyder, 2019). The sample consists of a substantial body of literature on environmental journalism, comprising 668 academic articles and books published between 1980 and 2025. This corpus includes case studies, media analyses, and literature reviews from countries such as the United States, Brazil, India, Russia, and Australia. The methodological process began with the identification of relevant primary and secondary sources through scholarly databases such as Scopus, complemented by materials retrieved via the Publish or Perish software and Dimensions, using keywords that captured the thematic scope of environmental journalism. The documents were then classified by theme and analyzed using VOSviewer (Ismandianto et al., 2024; Owen, 2014). After this categorization, all materials related to environmental journalism were compiled from the respective journals and publications.

Data collection was carried out through a systematic content analysis framework (Elo et al., 2024). To deepen the analytical rigor of the data, the researchers also employed VOSviewer software. The analytical framework used in this investigation applied a content-analysis framework that integrated key components relevant to the study of environmental journalism. Seven principal dimensions were included: (1) annual publications; (2) author publications; (3) researcher contributions; (4) patterns of research collaboration; (5) journal publications; (6) countries; and (7) methods.

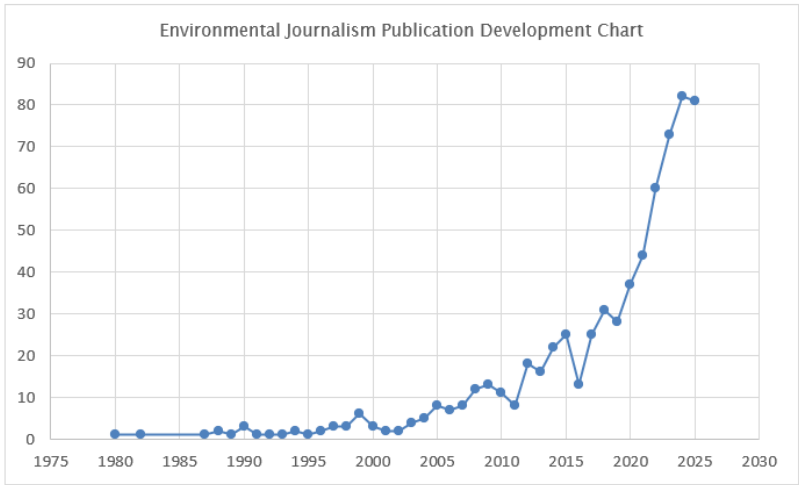
Each scholarly article and monograph was categorized into specific groups according to criteria aligned with the intended classification scheme. This categorization relied on the information conveyed by the authors in the abstract, methodology, and discussion sections. The compiled data were then presented through a bar-graph visualization. By integrating these methodological approaches, the research illuminates the trends, challenges, and emerging opportunities that shape the field of environmental journalism in the digital era.

3 Recent developments in environmental journalism

This investigation identifies a wide range of important findings concerning the prevailing trends, challenges, and future prospects of environmental journalism in the digital era (figure 1). Drawing on an extensive review of 668 scholarly articles and books from multiple countries, the analysis shows that environmental journalism is undergoing a paradigmatic shift away from traditional notions of objectivity toward more transparent forms of advocacy. The results further demonstrate that the integration of immersive technologies, including animation (Rochyadi-Reetz, 2021) and social media platforms (Tong, 2015), has enhanced audience engagement, although concerns persist regarding the authenticity of the information disseminated. Furthermore, research by Ashe (2024) underscores the significance of solutions-oriented narratives in framing environmental concerns, with the aim of eliciting positive emotional responses and fostering collective motivation within communities.

Figure 1

Development graph of environmental journalism publications



This graph illustrates the development of academic publications in environmental journalism from 1980 onward, including projections through 2025. The data show that scholarly output in this domain grew slowly during the early decades (1980–1990), a period marked by fewer than five publications per year on average. At that time, environmental journalism was regarded as an emerging field that had yet to gain substantial recognition within academic circles. From the 1990s onward, however, the number of publications rose gradually, signaling increased scholarly attention to environmental issues in journalistic contexts. This trajectory reflects a growing global awareness of urgent challenges such as climate change, deforestation, and sustainability, which has motivated researchers to examine how these concerns are portrayed in the media.

The most significant period in the development of environmental journalism publications occurred between 2010 and 2025, during which output increased substantially, rising from roughly 10 publications in 2010 to more than 80 by 2025. This increase can be attributed to several factors, including the intensifying urgency of global environmental issues – such as the increasingly evident phenomenon of climate change – combined with the evolution of digital media, which has enabled faster and broader circulation of information. The emergence of

social movements and the rise of more dynamic environmental activism have contributed to the growing acceptance of activist approaches within environmental journalism as a legitimate response to ecological crises, thereby expanding academic opportunities for research in this field. Moreover, improved access to scientific databases and the rapid expansion of open-access platforms have played an important role in increasing the volume of published work.

The findings of this study indicate that environmental journalism has undergone a significant transformation over the past several decades. One prominent development is the integration of narrative approaches with investigative methods in the communication and analysis of environmental issues. This trend reflects a shift toward more engaging, context-rich, and analytically rigorous forms of environmental reporting (Molina, 2024; Palau-Sampio, 2022). Research by Loose and Belmonte (2023) reveals that activism in environmental journalism is increasingly recognized as a legitimate response to pressing global crises, including climate change and deforestation. Conversely, the study by Matsilele (2023) demonstrates that financial assistance from non-governmental organizations (NGOs) and international donors supports the production of comprehensive, in-depth reporting, although such support often carries the risk of narrative bias. In addition, the rise of digital media has created new avenues for independent journalism, particularly in Global South countries such as Brazil and South Africa, where alternative platforms enable broader public engagement and more diverse environmental storytelling (Jones, 2021).

4 Challenges in the practice of environmental journalism

One of the primary challenges faced by environmental journalists concerns the physical, legal, and psychological threats they routinely encounter when reporting on sensitive issues, including the exploitation of natural resources and socio-environmental conflicts. Such circumstances often place them at considerable professional and personal risk (Freedman, 2020). Empirical research by Freedman (2020) indicates that the lack of specialized training in environmental journalism constitutes a substantial obstacle to the dissemination of accurate, comprehensive, and contextually grounded information. In addition, the political and economic pressures

exerted by governmental institutions and major corporations make environmental journalism increasingly vulnerable to censorship and to the deliberate shaping of public narratives (McGaurr, 2015). Within this framework, knowledge-based journalism (Witsen, 2018) is proposed as a viable means of bridging the gap between scientific understanding and public perception in environmental discourse.

Environmental journalism faces a wide range of multidimensional challenges that span political, economic, ethical, and technical aspects of the reporting process. One of the most prominent obstacles is the physical, legal, and psychological pressure that journalists experience when covering sensitive issues such as deforestation, environmental pollution, and broader socio-environmental conflicts (Jones, 2021). A significant proportion of journalists encounter threats of violence, intimidation, and harassment as a direct consequence of their reporting, a situation that is especially evident in developing countries such as Brazil and India. These journalists face elevated risks precisely because they address contentious environmental issues that may challenge powerful political or economic interests (Jones, 2021). Furthermore, the psychological consequences, including trauma, are a matter of serious concern, yet they seldom receive sufficient recognition from media organizations or international funding bodies. The lack of specialized education in environmental journalism constitutes an additional barrier for practitioners seeking to strengthen their professional competencies in this field (Schmidt, 2024).

In addition to external pressures and educational limitations, a significant tension exists between traditional notions of objectivity and the practice of environmental advocacy within journalism. These findings are consistent with the research of (Comfort, 2021), which indicates that journalists affiliated with environmental non-governmental organizations frequently embrace traditional journalistic standards, notwithstanding their classification as alternative media. A further major challenge confronting environmental journalism is the widespread political polarization and the growing prevalence of disinformation in the contemporary digital environment. Scientific consensus on climate change can consequently provoke oppositional reactions, particularly among individuals with specific political affiliations (Fahy, 2018; Rahman, 2020).

Furthermore, the emergence of digital technologies and the evolution of narrative methodologies present distinctive challenges

to the field of environmental journalism (Rochyadi-Reetz, 2021). In the context of South Korea, Yoon (2020) observed that media coverage predominantly emphasized the athletic aspects of the development of Mount Gariwang for the 2018 Winter Olympics, indicating that environmental considerations are often marginalized in the context of large-scale events. It is therefore imperative for journalists to integrate immersive technologies and innovative narrative approaches while maintaining the credibility and integrity of the information they present.

On a global scale, the challenges confronting environmental journalism also include restricted access to information and limited technical and financial resources. Research by Lough (2021) reveals that the downturn in the media industry in the United States has precipitated a decline in the number of journalists dedicated to environmental issues. Although social media and the internet facilitate the wider dissemination of information, they simultaneously exacerbate the risks associated with the spread of disinformation (Sachsman, 2020). Overall, these findings imply that environmental journalism requires comprehensive reforms in professional practice and educational frameworks, together with efforts to secure adequate resources, in order to sustain its relevance and effectiveness in addressing the increasingly urgent challenges of globalization and climate change.

5 General trends and dominant researchers in environmental journalism

Solutions-oriented journalism is gaining increasing acceptance as a strategy for raising public awareness and enhancing engagement with environmental issues (Azim & Ebrahim, 2024). In addition, environmental journalism should seek a balanced position between traditional notions of impartiality and a more inclusive, advocacy-oriented approach, particularly when addressing issues of environmental justice and the rights of local communities. Future research should also examine how the publication of scholarly findings shapes the development and influence of this field.

Table 1

Leading 10 scholarly contributions by practitioners of environmental journalism

Name, Organization, Country	Publications	Citations	Citations mean
Eloisa Beling Loose Federal University of Rio Grande do Sul, Brazil	13	20	1.54
Ilza Maria Tourinho Girardi Federal University of Rio Grande do Sul, Brazil	6	12	2.00
Bruno Takahashi Michigan State University, United States	6	32	5.33
Libby Lester University of Tasmania, Australia	5	132	26.40
Débora Gallas Steigleder Federal University of Rio Grande do Sul, Brazil	5	6	1.20
Suzannah Evans Comfort Indiana University Bloomington, United States	4	12	3.00
Joann Myer Valenti Brigham Young University, United States	4	77	19.25
Katarini Giroldo Miguel Federal University of Mato Grosso do Sul, Brazil	4	1	0.25
Eric Freedman Michigan State University, United States	4	35	8.75
David Robie New Zealand	4	30	7.50

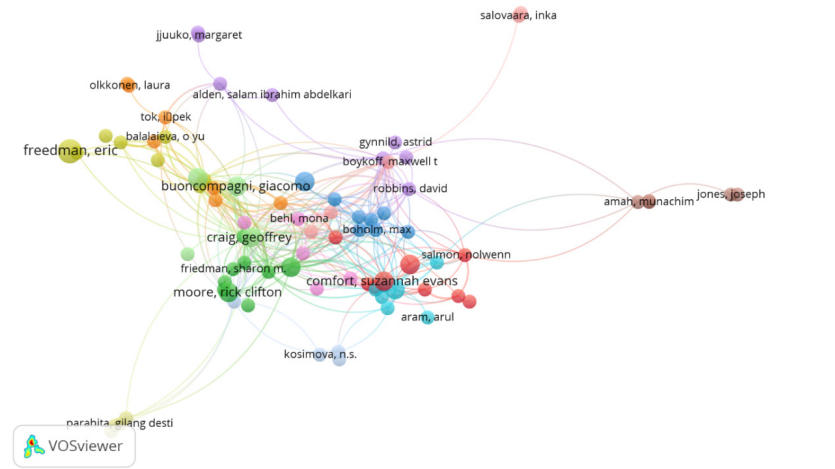
Table 1 presents the distribution of publications attributed to ten authors or research teams in the field of environmental journalism. The data show that Eloisa Beling Loose (13) has made the most substantial contribution, with a total of thirteen publications, underscoring her pivotal role in advancing and disseminating knowledge on environmental journalism. Ilza Maria Tourinho Girardi (6) and Bruno Takahashi (6) occupy the second position with six publications each, demonstrating their substantial engagement in the field. Libby Lester (5) and Débora Gallas Steigleder (5) rank third with five publications apiece, whereas Suzannah Evans Comfort (4), Joann Myer Valenti (4), Katarini Giroldo Miguel (4), Eric Freedman (4), and David Robie (4) each have four publications. Eloisa Beling Loose, affiliated with the Federal University of Rio Grande do Sul in Brazil, holds a leading position in publication output, with a total of 13 documents. Although she records a comparatively low citation count (20) and mean citation rate (1.54), her quantitative prominence underscores Brazil's substantial contribution to the theoretical foundations and practical applications of environmental journalism in the Global South. Conversely, Libby Lester, of the University of Tasmania in Australia, records the highest mean citation rate (26.40) despite having only five publications.

This pattern confirms that the quality and influence of scientific contributions often outweigh the sheer quantity of publications. This researcher has plausibly authored foundational works that have become key references in the literature on environmental journalism, particularly those addressing ethics and the representation of environmental concerns in developed nations. Moreover, Bruno Takahashi, of Michigan State University in the United States, stands out as a prolific scholar with a notably high mean citation rate (5.33), reinforcing the view that the institution serves as a global research hub in this field, particularly in relation to journalistic ethics and the challenges prevalent in the Latin American context. For developing nations such as Brazil and India, these findings underscore the need to invest in local research capacity, including infrastructural support, methodological training, and access to international research databases. The low mean citation levels observed among certain researchers in Asia and Africa further illuminate ongoing disparities in access to, and participation within, global scientific networks. Collaborative initiatives from governmental bodies and international institutions are therefore imperative to strengthen

the research ecosystems of these regions and to facilitate more equitable contributions to global scientific discourse. Cross-border collaboration should be actively promoted through joint funding schemes, researcher exchange programs, and sustained mentorship initiatives that build long-term scholarly capacity.

Figure 2

Collaborative authors in environmental journalism

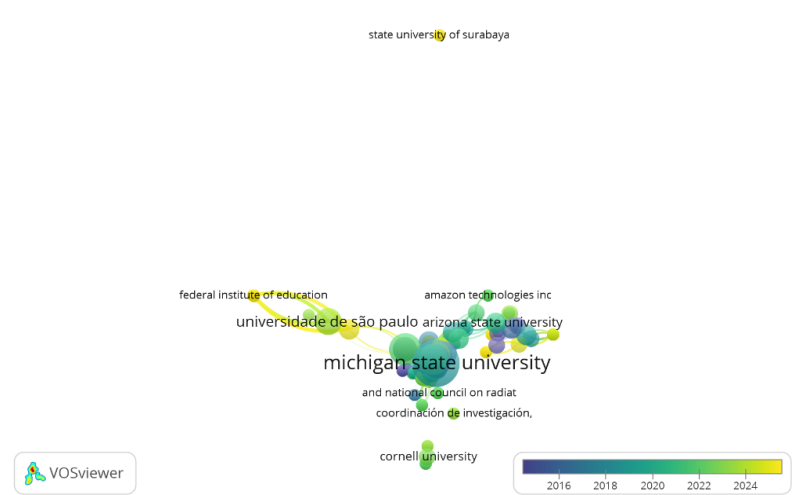


Subsequent analysis indicates a marked disparity between the most prolific author (E. Freedman) and other scholars. This pattern may signify differences in research productivity, access to resources, or a concentrated focus on specific topics within environmental journalism. Authors with two publications may have a more specialized research focus or may have entered the field only recently. The chart also provides a comprehensive depiction of the collaborative dynamics of environmental journalism, in which some authors have established strong scholarly reputations through sustained contributions, while others are still working to enhance the visibility and influence of their academic work.

Collectively, these data illuminate the importance of cooperation and collaboration within environmental journalism for strengthening both knowledge and professional practice in the effective reporting of environmental issues. Eric Freedman emerges

as a pivotal node, characterized by numerous connections spanning various clusters and thereby illustrating his role as an intermediary linking distinct research groups and thematic domains – an attribute frequently associated with high betweenness centrality. Similarly, Suzannah Evans Comfort, Giacomo Buoncompagni, and David Robbins occupy positions within a tightly interconnected subgroup, implying strong intra-cluster collaboration likely based on shared institutional affiliations or common research themes (e.g., environmental communication, media studies, or sustainability). The color-coded groupings further elucidate distinct thematic communities, including clusters around Astrid Gynnild and Maxwell T. Boykoff, which appear to focus on climate journalism, and clusters around Inka Salovaara and Joseph Jones, which may pertain to organizational or cross-cultural communication. This structural complexity highlights the multidisciplinary nature of the field under investigation.

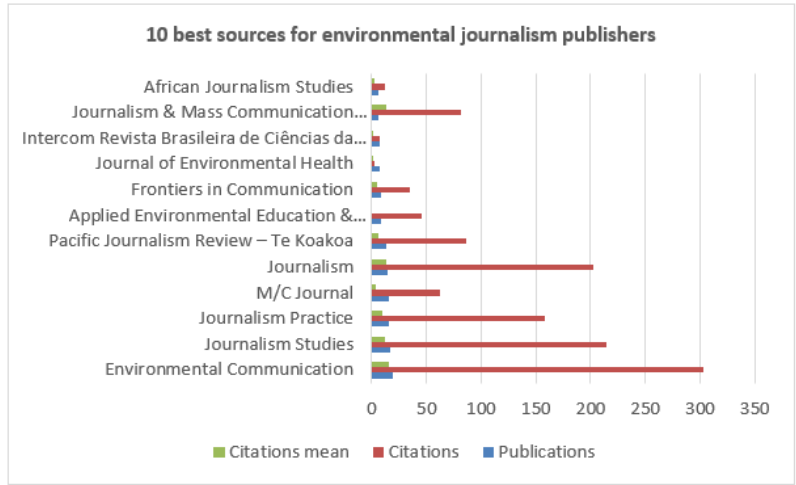
Figure 3
Institutions of research entities



Institutional network visualizations reveal a structure of inter-agency research collaboration in which Michigan State University occupies the most central and influential position. Larger nodes signify a higher volume of publications or a greater level of collaborative activity, whereas the color differentiation of nodes corresponds to the temporal distribution of publication years (2016–2024), illustrating the progression of research partnerships over time. The inclusion of institutions such as the Universidade de São Paulo, Arizona State University, and Cornell University underscores the existence of a strong global collaboration network and provides evidence of the ongoing trend toward internationalization in academic research. At the same time, the presence of Amazon Technologies Inc. accentuates the increasing role of the private sector in research partnerships, a dimension that is becoming increasingly relevant in contemporary bibliometric discussions.

Figure 4

The ten leading journals publishing environmental journalism research



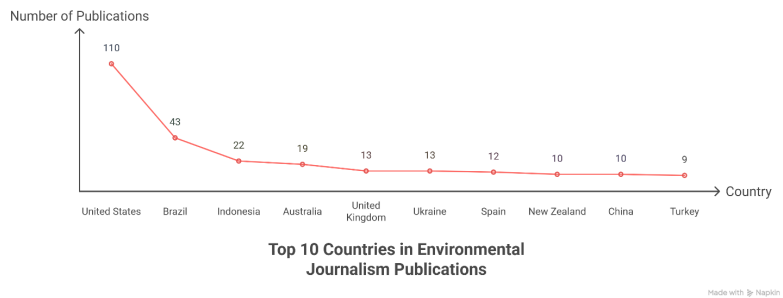
This chart presents the ranking of the top ten journals according to their publication output, citation counts, and mean citation rates in the field of environmental journalism. The data show that Environmental Communication is the most productive journal, recording the highest number of publications (approximately

300), followed by Journalism Studies and Pacific Journalism Review: Te Koako, both of which report around 200 publications. These journals also accumulate a substantial volume of citations, indicating that they achieve not only notable quantitative productivity but also considerable influence on scholarly discourse in the field. Conversely, Journalism & Mass Communication Quarterly and Journalism Practice occupy a middle position in terms of publication volume, yet record comparatively lower citation counts than their peers. This pattern suggests that, despite producing a substantial number of articles, their scientific influence remains weaker than that of journals with a stronger emphasis on environmental subjects.

The mean citation metric (average citations per publication) serves as an indicator of a journal's scholarly prestige and overall academic quality. In this chart, Environmental Communication and Journalism Studies display notably high mean citation levels, signifying that articles published in these journals are cited frequently by other researchers. This pattern positions both outlets as highly influential contributors to the field of environmental journalism. In contrast, African Journalism Studies and Intercom: Revista Brasileira de Ciências da Comunicação record relatively lower mean citation rates despite a substantial number of publications, which indicates that although both journals actively disseminate scholarly work, their academic influence remains limited in comparison with peer outlets. Factors such as thematic focus, accessibility, and editorial standards may contribute to these disparities. Additionally, Frontiers in Communication and Applied Environmental Education & Communication record notably high mean citations, suggesting that, despite publishing fewer articles, their scholarly quality and influence are significantly more prominent.

Figure 5

Countries in environmental journalism research

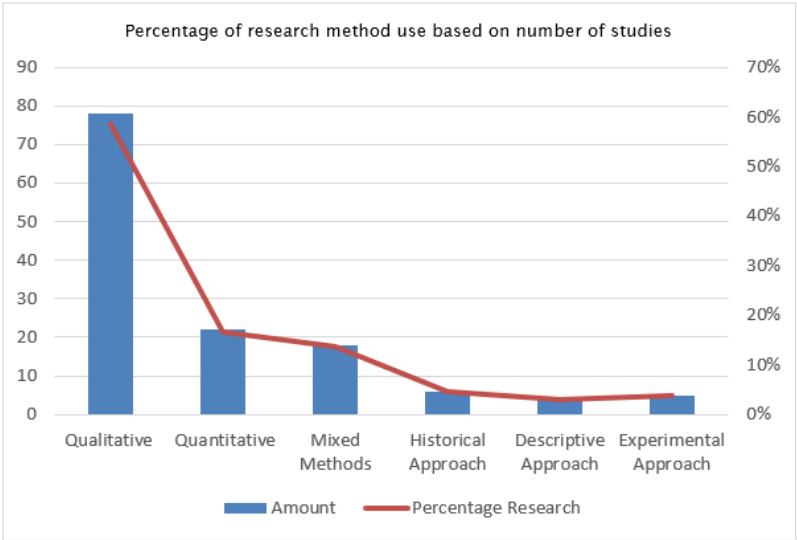


The analysis of country networks indicates that the United States (110) holds a leading position in the production of scientific literature, and is distinguished not only by its volume of output but also by its role as a central hub for global scientific collaboration. Brazil (43) follows in second position and exemplifies an influential contribution to the establishment of transcontinental research networks, particularly within the broader South American region. Indonesia (22), Australia (19), and the United Kingdom (13) further illustrate that these countries have the capacity to build extensive collaborative networks even though their publication volume is comparatively lower. These findings underscore that international collaboration is increasingly recognized as a vital element in advancing the field, with these nations serving as channels of knowledge that connect diverse geographic regions.

The pattern also mirrors substantial disparities in participation and in the degree of emphasis placed on environmental journalism across different parts of the world. The heightened attention given to environmental journalism in the United States and Brazil may be attributable to factors such as more advanced environmental policies, stronger research infrastructures, and higher levels of public awareness of environmental issues. Taken together, these findings provide a comprehensive portrayal of global trends in environmental journalism and underscore the importance of adopting multilateral approaches in order to understand and address contemporary environmental challenges effectively.

Figure 6

Methodological approaches in environmental journalism



The methods used in environmental journalism research vary considerably, reflecting the complexity of the issues examined and the distinct geographic and social contexts in which the studies are conducted. Among the 668 articles reviewed, qualitative approaches predominate (58.6%), involving descriptive narrative analysis, in-depth interviews, and case studies that explore the deeper meanings embedded in environmental journalism practices (Vasileva, 2019). For example, the study by Loose and Belmonte (2023) employs documentary analysis and a literature review to investigate the growing presence of activism in Brazilian environmental journalism. In contrast, quantitative approaches appear in approximately 16.5% of the studies and focus on measuring frequencies, patterns, or statistical relationships among variables in environmental journalism coverage (Maduneme, 2024; Smith, 2018).

Additionally, several studies (13.5%) adopt mixed-methods approaches, combining qualitative and quantitative techniques to provide a more comprehensive understanding of environmental journalism practices (Takahashi, 2024). Approximately 4.5% of the studies also adopt a historical approach to trace the development of environmental journalism, such as Kovarik’s (2020) work, which examines its evolution across Asia, Africa, and Latin America. Content analysis serves as a

primary methodological approach in many studies (approximately 40%) and is employed in both quantitative and qualitative forms. Nearly all of these methods address global environmental concerns such as climate change, deforestation, and environmental justice. Scholars nevertheless face challenges in selecting methodological approaches that effectively answer particular research questions. The findings indicate that research methods in environmental journalism must be chosen with careful consideration of the local context and the intended research objectives, while also taking into account the need to balance objectivity and advocacy in reporting on environmental issues.

6 Conclusion

This study indicates that environmental journalism encounters substantial challenges across different regions of the world, yet holds considerable potential to raise public awareness and to shape environmental policy. Key insights show that activism is becoming an increasingly critical element of environmental journalism, especially in Global South countries such as Brazil, Indonesia, and India, where environmental challenges are frequently tied to broader social and economic inequalities. Moreover, the expansion of digital technologies and social media has created new opportunities for independent journalism to flourish, although the field still grapples with persistent problems of misinformation and sensationalism.

Despite these advances, the findings reveal that many journalists continue to encounter physical, legal, and psychological threats, in addition to shortages of resources and specialized training. On a global level, environmental journalism is of essential importance to both social and environmental advocacy, yet maintaining a balance between objectivity and activism remains a complex challenge. In certain regions, such as Australia, journalists continue to provide in-depth coverage of environmental issues despite political and commercial pressures. In contrast, in areas such as the Middle East and West Africa, environmental concerns are often overlooked or politicized, highlighting the need for a more inclusive and justice-oriented framework.

Overall, the findings indicate that environmental journalism has evolved into not only a source of information but also a catalyst for broader social and environmental change. Several recommendations follow from these results. First, educational institutions should

strengthen the journalism curriculum by emphasizing the importance of environmental reporting. Second, collaboration among journalists, scientists, activists, and local communities should be promoted in order to foster more comprehensive and impactful reporting. Finally, environmental journalists should receive continuous support through adequate funding and legal protection, enabling them to address sensitive environmental issues without fear of suppression or intimidation. Taken together, these recommendations aim to ensure that environmental journalism remains relevant, effective, and sustainable in responding to the urgent challenges posed by globalization and climate change.

REFERENCES

- Ashe, I. (2024). Seeing Beyond Crisis: Analyzing Photographs and Photographer Bylines in Solutions-Oriented Environmental Journalism Stories. *Journalism Studies*, 26(1), 41–61. DOI: 10.1080/1461670X.2024.2412210
- Azim, A., & Ebrahim, G. (2024). Solutions Journalism and Sustainable Development: News Coverage in Arab Solutions Journalism and Sustainable Development: News Coverage in Arab Websites 2024. *New Media and Mass Communication*, 106, 101–128. DOI: 10.7176/NMMC/106-10
- Chattoo, C. B. (2021). An Investigative Journalist and a Stand-up Comic Walk into a Bar: The Role of Comedy in Public Engagement with Environmental Journalism. *Journalism*, 22(1), 196–214. DOI: 10.1177/1464884918763526
- Comfort, S. E. (2021). Curated Journalism: A Field Theory Approach to Journalistic Production by Environmental Non-governmental Organizations. *Journalism*, 22(2), 501–518. DOI: 10.1177/1464884918786402
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2024). Qualitative Content Analysis. *SAGE Open*, 4(1), 1–10. DOI: 10.1177/2158244014522633
- Fahy, D. (2018). Objectivity as Trained Judgment: How Environmental Reporters Pioneered Journalism for a “Post-truth” Era. *Environmental Communication*, 12(7), 855–861. DOI: 10.1080/17524032.2018.1495093
- Forde, S. (2018). Journalism as an Advocate for Social Change and Public Engagement: Reporting Environmental Crisis in the Digital Era. In A. K. Schapals, A. Bruns & B. McNair (Eds.), *Digitizing Democracy* (pp. 75–87). Routledge.

Freedman, E. (2020). In the Crosshairs: The Perils of Environmental Journalism. *Journal of Human Rights*, 19(3), 275–290. DOI: 10.1080/14754835.2020.1746180

Friedman, S. M. (2015). The Changing Face of Environmental Journalism in the United States. In A. Hansen & R. Cox (Eds.), *The Routledge Handbook of Environment and Communication* (pp. 144–157). Routledge.

Hui, X. (2023). Exploring Regenerative Tourism Using Media Richness Theory: Emerging Role of Immersive Journalism, Metaverse-Based Promotion, Eco-Literacy, and Pro-Environmental Behavior. *Sustainability (Switzerland)*, 15(6), 1–20. DOI: 10.3390/su15065046

Ismandianto, I., Sazali, H., & Sikumbang, A. T. (2024). Bibliometric Analysis of the Radio Da'wah Research. *Jurnal Dakwah Risalah*, 35(1), 16–32. DOI: 10.24014/jdr.v35i1.28927

Jamil, S. (2023). Environmental Journalism Education beyond the Conventional Pedagogical Approaches: Exploring the Scope of Experiential Learning to Train Pakistan's Journalism Students. *Media Asia*, 50(1), 4–23. DOI: 10.1080/01296612.2022.2067946

Jones, J. (2021). Caring with the Public: An Integration of Feminist Moral, Environmental, and Political Philosophy in Journalism Ethics. *Journal of Media Ethics: Exploring Questions of Media Morality*, 36(2), 74–84. DOI: 10.1080/23736992.2021.1926255

Kovarik, B. (2020). The Rise of Environmental Journalism in Asia, Africa, and Latin America. In D. B. Sachsman & J. M. Valenti (Eds.), *Routledge Handbook of Environmental Journalism* (pp. 52–69). Routledge.

Loose, E. B., & Belmonte, R. V. (2023). Activism in Environmental Journalism: How Four Key Moments Have Helped Shape an Engagement Practice in Brazil. *Brazilian Journalism Research*, 19(3), 1–28. DOI: 10.25200/BJR.v19n3.2023.1594

Loose, E. B., & Camana, Â. (2015). Reflections on the Role of Environmental Journalism in Face of the Risks of Contemporary Society. *Observatorio*, 9(2), 119–132.

Lough, K. (2021). Journalism's Visual Construction of Place in Environmental Coverage. *Newspaper Research Journal*, 42(2), 253–269. DOI: 10.1177/07395329211018527

Maduneme, E. (2024). Solutions Journalism Stories Boosts Pro-Environmental Behavioral Intentions Through Positive Affect and Collective Efficacy Beliefs. *Environment and Behavior*, 56(3), 244–275. DOI: 10.1177/00139165241286874

Matsilele, T. (2023). Through the Media Looking Glass: Journalists' Perceptions on South Africa's Funded Environmental Journalism. *African Journalism Studies*, 44(1), 58–72. DOI: 10.1080/23743670.2023.2280269

McGaurr, L. (2013). Not So Soft?: Travel Journalism, Environmental Protest, Power and the Internet. In L. Lester & B. Hutchins (Eds.), *Global Crises and the Media Environmental Conflict and the Media* (pp. 93–104). Peter Lang.

McGaurr, L. (2015). Environmental Communication and Travel Journalism: Consumerism, Conflict and Concern. In L. McGaurr (Ed.), *Environmental Communication and Travel Journalism: Consumerism, Conflict and Concern* (pp. 77–80). Routledge.

Molina, A. P. (2024). Narrative-environmental Journalism of Eliane Brum's, a Defense to the Lungs of the Planet. *Historia y Comunicacion Social*, 29(1), 79–87. DOI: 10.5209/hics.95822

Owen, G. T. (2014). Qualitative Methods in Higher Education Policy Analysis: Using Interviews and Document Analysis. *Qualitative Report*, 19(26), 1–19. DOI: 10.46743/2160-3715/2014.1211

Palau-Sampio, D. (2022). Territorial Rights, Identity, and Environmental Challenges in Latin American Literary Journalism. In R. Alexander & W. McDonald (Eds.), *Literary Journalism and Social Justice* (pp. 243–258). Palgrave Macmillan.

Rahman, N. (2020). Journalism and Environmental Issues in the Middle East. In D. B. Sachsman & J. M. Valenti (Eds.), *Routledge Handbook of Environmental Journalism* (pp. 373–380). Routledge.

Roxyadi-Reetz, M. (2021). Prioritizing Development, Vying for Attention: Factors Influencing the Practice of Environmental Journalism in the Global South. In B. Takahashi, J. Metag, J. Thaker & S. E. Comfort (Eds.), *The Handbook of International Trends in Environmental Communication* (pp. 220–231). Routledge.

Sachsman, D. B. (2020). Introduction: Environmental Journalism. In D. B. Sachsman & J. M. Valenti (Eds.), *Routledge Handbook of Environmental Journalism* (pp. 1–16). Routledge.

Schmidt, H. C. (2024). Training Tomorrow's Environmental Journalists: Assessing the Extent of Environmental-Themed Training in College-Level Journalism Programs. *Applied Environmental Education and Communication*, 16(1), 17–28. DOI: 10.1080/1533015X.2016.1273154

Smith, H. (2018). Science Training and Environmental Journalism Today: Effects of Science Journalism Training for Midcareer Professionals. *Applied Environmental Education and Communication*, 17(2), 161–173. DOI: 10.1080/1533015X.2017.1388197

Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333–339. DOI: 10.1016/j.jbusres.2019.07.039

Takahashi, B. (2024). Reporting with Care: Reflections on Environmental Journalism, Ethics, and Latin American Challenges. *Environmental Communication*, 18(1), 61–67. DOI: 10.1080/17524032.2023.2296847

Tong, J. (2015). Offline Investigative Journalism and Online Environmental Crusades. In A. Hansen & S. Depoe (Eds.), *Palgrave Studies in Media and Environmental Communication* (pp. 139–163). Palgrave MacMillan.

Vasileva, P. (2019). Eco-comics As An Educational Tool For Teaching Environmental Journalism And Esp. *Journal of Teaching English for Specific and Academic Purposes*, 7(4), 431–442. DOI: 10.22190/JTESAP1904431V

Wilson, B. (2024). A Proposal for an “Environmental Sports Journalism” (ESJ) Approach: Principles and Illustrative Examples from Coverage of the Rio 2016 and Pyeongchang 2018 Olympic and Paralympic Games. *Sociology of Sport Journal*, 41(1), 68–80. DOI: 10.1123/ssj.2022-0149

Witsen, A. Van. (2018). Knowledge-based Journalism in Science and Environmental Reporting: Opportunities and Obstacles. *Environmental Communication*, 12(6), 717–730. DOI: 10.1080/17524032.2018.1455723

Yoon, L. (2019). Journalism, Environmental Issues, and Sport Mega-Events: A Study of South Korean Media Coverage of the Mount Gariwang Development for the 2018 Pyeong Chang Winter Olympic and Paralympic Games. *Communication and Sport*, 7(6), 699–728. DOI: 10.1177/2167479518811381

Yoon, L. (2020). Reflections on an Attempt to Do “Environmental Sports Journalism”: The Behind-the-scenes Story of the Documentary Mount Gariwang: An Olympic Casualty. In *Research in the Sociology of Sport* (Vol. 13, pp. 179–198). <https://doi.org/10.1108/S1476-285420200000013011>

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