



The influence of language on environmental advocacy for aquatic conservation in multicultural coastal societies

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Abstract

The diffusion of environmental values, beliefs, and ethics through conservation language influences communication channels and messages. In multicultural coastal societies, the interactions and interdependencies among various linguistic and cultural groups shape attitudes, conversations, and behaviors toward aquatic ecosystems. The study focuses on linguistic and ecological advocacy and the importance of language in defining the concept of "aquatic thought, "the socio-cultural consciousness associated with water and water bodies." Through discourse analysis of indigenous, local, and world coastal linguistic ecologies, the study examines the ecological metaphors, stories, and language that aid or impede the development of ecological consciousness and care. The findings demonstrate that languages with rich, deep metaphors of "water," aquatic ecosystems, and freshwater systems hold both ecological wisdom and strong emotional and spiritual ties of community attachment and integration. The integration of local languages into environmental conservation advocacy and education, in practice and theory, enhances

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value reconciliation by fostering inclusivity and integrating cultural perspectives into the science of advocacy. The study culminates in demonstrating that inclusivity in language enhances community engagement, ecological citizenship, and advocacy for aquatic resources. Drawing on "aquatic thought" as a linguistic and cultural pillar, the paper illustrates the importance of language diversity in developing community-based, culturally resilient aquatic conservation models.

Keywords: Aquatic conservation, Environmental communication, Linguistic diversity, Multicultural coastal societies, Aquatic thought, Indigenous knowledge, Sustainability

Introduction

Language is essential for developing thought, culture, and perspective within one's environment. In the multicultural communities along the coast, associations with the community's livelihood make the importance of language even more prominent (Nascimento and Fung, 2024). Language, through the verbal and the written, conveys the ecological values, oral histories, and local expertise of one's relationship with a water body (Singh and Joshi, 2025). The presence of different languages and dialects signifies a culture and a unique worldview for caring for the environment (Molai, 2019). Each language has unique metaphors and ideas that shape how a person engages with the environment (Canfield *et al.*, 2024). Hence, the arrangement of communication to manage and alter the environment deserves attention, especially in a setting with multiple languages (Gokhale and Kaur, 2024). The focus on language as a tool for developing ecological thinking paves the way for culturally sensitive and inclusive advocacy for the conservation of water bodies (Araneda *et al.*, 2025).

For quite a while, communication about the environment has been one-sided, primarily dominated by the global

scientific community (Hindhede and Saavedra, 2024). Indigenous communities, even those with rich, ecologically oriented communication traditions, have been excluded from these conversations (Singleton *et al.*, 2023). Integrating these traditions into the dialogue surrounding the conservation of cultures and sentiments would be beneficial. Locally distributed and contextually meaningful languages foster a sense of custodianship and concern for nature among coastal communities (Khaledi, Owfi and Pahlevan, 2025). The loss of indigenous knowledge and, consequently, the languages that carry it, signals the loss of crucial ecological understanding. The combination of indigenous languages with contemporary advocacy approaches, conservation practice, policy, and educational structures, framed within a recognized social order, will promote personal and meaningful community efforts toward conservation. This will, undoubtedly, work toward the loss of culture and the loss of ecology as they actively engage with the local environment and its conservation (Ahmad, 2024).

This study uses the term "aquatic thought" to deepen the understanding of language, culture, and geography in the context of coastal communities. It emphasizes the consciousness of

communities and describes the togetherness spirit that revolves around water, wildlife, and sustainable communion. This showcases the intersections of language and ecology, especially metaphors, constructions, and culturally driven narratives in intricately intertwined ecologies. The research postulates that linguistic heterogeneity would underpin and form the basis of a proposal for just and lasting stewardship of the targeted water assets (Harrison, 2023; Gurbanova, 2024). In such a case, language becomes much more than advocacy and communication. It will become an active ethics of advocacy (Khasanah *et al.*, 2024). Such an advocacy for change in culture would foster citizenship geared towards the advocacy of resilient aquatic systems, which will conserve the systems for the ecologically, culturally, and economically active communities to benefit for many years to come.

Key Contributions:

- Presented Aquatic Thought, connecting language, culture, and environment in coastal areas.
- Highlighted how language inclusivity in conservation works and sparks awareness, participation, and stewardship.
- Used NVivo 14 for multilingual data analysis and validation of language communication in aquatic advocacy.
- Developed a culturally integrated framework that merges the conservation of languages with the management of aquatic resources sustainably.

This paper is structured to give the reader a complete understanding of the

impact of language on the conservation of water bodies. In the Literature Survey, I discuss prior studies on the topic and focus on the gap between language and eco-advocacy. In the Proposed Method, I give five subdivisions that focus on the interconnection of language, culture, communication, and policy to achieve complete conservation of water bodies on the lines of sustainability. In the Results and Discussion, I analyze data using NVivo 14 and show the seamless effectiveness of a multilingual paradigm. In the end, the Conclusion also states the centrality of language inclusivity in building community and sustainable management of aquatic resources.

Literature Survey

Aquatic conservation research has branched out to include human, cultural, and linguistic dimensions of environmental stewardship. In the early days of marine biology and coastal management, much of the research focused on the protection of aquatic ecosystems, without consideration of the role that the community's perception and language framework might play (Johri *et al.*, 2021; Huang, 2025). Over the years, the field of environmental communication and sociolinguistics has intertwined communication practices of the community concerning water and the behavior adopted for conservation (Khan, Ullah and Sarwar, 2025). Ecolinguistics scholars posit that the decline of linguistic diversity and the decline of biodiversity are both global homogenizations (Ashraf, Arslan and Murtaza, 2025). In coastal societies, multiculturalism and social-ecological systems integrate multiple ecosystems and offer sustainable resource

management practices (Blanco and Otero, 2025). Additional research explains that culturally aquatic thought—knowledge of the water, its life, and the activities centered on it—is represented symbolically in metaphors, myths, and idioms, and in the case of the sea and rivers, tied to language constructions of the community. These findings show that language can convey ecological knowledge and construct an emotional and moral sentiment toward aquatic ecosystems (Toner *et al.*, 2023).

Research still has some significant gaps to fill. Worldwide, conservation strategies tend to overgeneralize and default to the world's dominant languages, thereby ignoring the diverse, context-rich local vernaculars. Hence, emotionally significant local meanings in the environmental context are lost. Non-native outreach, particularly to emotionally disengaged coastal communities, creates policy gaps that, for all practical purposes, exclude these coastal populations from the conversation. In conservation communication, the lack of inclusive language becomes a barrier to participation, especially when advocacy circles on traditional ecological knowledge are oral. Even in the marginal field of aquatic research, preferences for quantitative methods over qualitative community-based testimonies persist. Ironically, community-based testimonies are essential to appreciate the connection between language and ecology in conservation. To fill these gaps, cultural linguistics, social ecology, and language-oriented community-based conservation must be integrated. This will express a living environmental ethic that will make

community aquatic conservation initiatives mitigate the degradation of these communities.

This study attempts to qualitatively and comparatively interpretively bridge these gaps. Different coastal societies and their distinct environmental discourses are examined and situated within indigenous and local and global discourses, ecology, and conservation discourse involving aquatic life. This study incorporates a blend of regional case studies and environmental interviews and analyzes the discourse to gauge the worth of the action toward the environment. This study uses aquatic thought to demonstrate the power of the discourse in building a community's ecological consciousness and sense of identification. The community also genuinely draws on ethnographic discourse analysis. This study examines multilingual advocacy frameworks and local narratives to illustrate the intersections of discourse and conservation, which present aggravating challenges. This comprehensive integration of literature and approach seeks to culture and the science of aquatic ecosystems to devise a novel paradigm in environmental communication and discourse and ecology.

Proposed Method

Linguistic Reflections of Aquatic Ecosystems

Coastal communities exhibit varying relationships with their ecosystems and the sea. The communities and their people also describe the various communities having intricate and sophisticated command of the different ecosystems and their interconnections,

and the ecosystems are described and presented beautifully. They also depict the communities having varied and refined ways of expressing their ecosystems. Vocabulary and phrases about different levels of the tides and seasons demonstrate the comprehensive levels of valuation and interdisciplinary works of the communities. There is a difference between the two, and observation and scientific expositions together provide a deeper understanding. Emotionally centered, integrated community and culture expressions that foster integration and individuality provide complexity and balance.

Honoring the traditions of the water languages helps keep the memories of

environmental stewardship. While the languages of globalization dominate education and policy, many local languages containing water-related terms and ecological knowledge are disappearing. Documentation and revitalization of these terms allow communities to reclaim and re-engage with water and contribute to modern discussions on conservation. Researchers know that language carries local ecological knowledge, and thus, science and traditions can be merged to formulate a culturally sensitive and integrated focal point for aquatic conservation. Therefore, the mission of preserving languages is vital to achieving the goal of sustaining freshwater ecosystems for the future.

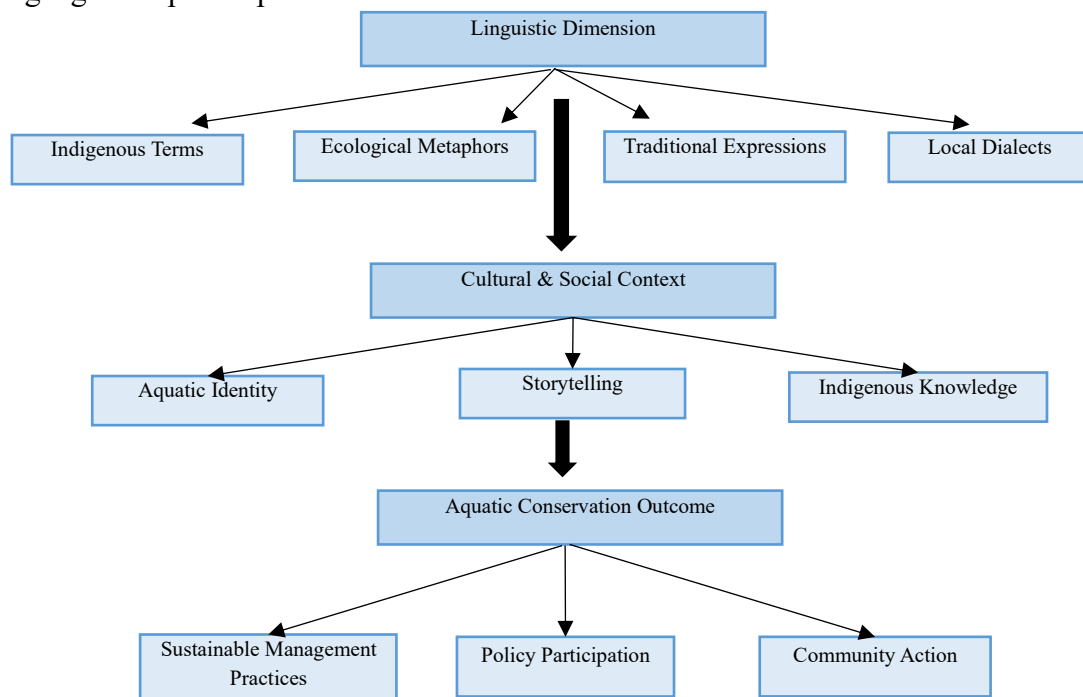


Figure 1: Linguistic-cultural framework for aquatic conservation.

Figure 1 showcases how different familiar language interactions shape intercultural appreciation and behavior differences that are culturally conditioned around the preservation of coastlines in ethnically diverse coastal communities. It begins with the utterances of the indigenous languages and transits

through the building ethnocultural prisms and lens, and the enduring management and mobilization of the relevant coastline stretches. It shows how the discourse elements, culture, and environment synergize to galvanize custodianship of the coastal water ecosystems.

Cultural Expressions and Aquatic Identity

Coastal communities from various cultures have a profound respect for aquatic life. Their environmental...folklores....songs...celebrate. Praise the emotional and spiritual aspects. Highlight the idea that humans and water coexist, and that people's identity is 'aquatic'. The tales of sea Gods...the practices of fishermen...the ancestral spirits guarding water...teach lessons of moral restraint and balance. Resource restraint and balance. Conservationists... These traditions can be blended with modern ones. These can highlight and emphasize environmental messages. Promote pride and strengthen unity in the communal responsibility of the people.

Reviving cultural practices concerning water bodies is an opportunity for the preservation of heritage, and the revival of some cultural practices, even the vernacular songs and locally performed folk tales, contain knowledge and communicate resource sustainability practices concerning sea creatures and the various fishing seasons. The noted approach is the integration of cultural practices in the teaching and practice of advocacy surrounding the environment. The positive and strong advocacy and association can be achieved by the integration of some traditions into modern policies, and in turn, nurture the practices and use of the language around heritage. This encourages the restoration and protection of bodies of water, both marine and freshwater, and promotes the cultural practices around them.

Aquatic Communication and Advocacy Networks

Whether knowledge is scholarly or public knowledge is bridged based on the success of different approaches of communication. Advocacy and conservation communication models of the present day need a different communication model, which incorporates a "word of the day" approach, which could potentially mean the various local dialects and tongues, as well as the official national and global languages. Coasts and the members of the community can understand a lot better if the environment is communicated using the dialects or tongues of the natives. The advocacy model is a community network for advocacy that uses storytelling, local radio, and workshops as primary tools for advocacy and community engagement for the conservation of the sea. The advocacy networks for communication become relevant, inclusive, and participatory for those who rely on the sea for their communication.

A better understanding of language and ecology enables teachers and environmental specialists to become potent, effective agents for change. Combining training from the fields of Educator... Environmental Linguistics, intercultural communication, and marine ecology helps practitioners learn how to integrate scientific information and local culture. Such a model shifts the focus of conservation efforts from a top-down approach and instead helps change the community collaboratively from a grassroots approach. Expanding these networks promotes public discourse, community partnership, and responsible stewardship of resources. Advocacy that

shifts to become more flexible promotes change initiatives that are environmentally positive and sustainable for the community.

Policy Frameworks for Aquatic Sustainability

Policies require a consideration of "the politics of language". Just as ineffective policies arise from the top-down, old-school, and thus misunderstood policies, old-school policies also involve a neglect of language. Recommendations include incorporating indigenous marine/local policy vocabularies, educational policy, and policy awareness materials. This linguistic asset within the devolution community marine management enhances the community ownership and accountability of policy. This "positive" policy approach provides the opportunity for a mesh and coexistence of a cultural policy and policy marine integration, thus positively incorporating cultural aspects of marine policies.

Success requires the integration of diverse fields: language, social science, marine biology, and marine policy and associated fields. Language-inclusive marine policy is a combination of environmental protection and community culture preservation. Using the linguistic frameworks and expressions of local community members alongside national policy will smooth access friction associated with these policies. Collaborative marine policy will help assure the right to current access to marine resources and the right to sustain those resources for future generations.

Sustainable Aquatic Empowerment and Future Vision

The last division envisions a model of empowered sustainable aquatics based on linguistic, cultural, and ecological coexistence. Encourage communities along the coast and rivers to lead the advocacy of conservation so that advocacy arises from within rather than being imposed from outside. Making the local aquatic knowledge available and involved in the initiative environmental decisions will lend the initiative's decisions credibility and will probably promote the ecological initiative. Community programs designed and implemented with the reuse of native language, storytelling, and community participatory monitoring will encourage the relationship of the people to their aquatic environment. This permits the initiative to design participatory environmental governance where everybody takes the initiative to protect and restore the aquatic biodiversity.

This proposal envisions a future in which a global movement uses advocacy language and activism to sustain cultural aquatic ecologies. The factors of aquatic conceptualization, language inclusion, and environmental ethics will expand the definition of sustainability to embrace advocacy work as a cultural and ecological effort to transform conservation. Societies that promote the integration of an ecological understanding with a community's traditional story will encourage the development of a composite approach that will celebrate the community's relationship to water. Healthy coexistence will promote aquatic, cultural, and linguistic ecosystems.

Communities that communicate, educate, and pass advocacy language through the generations will promote the movement

of the ocean to echo advocacy to the community.

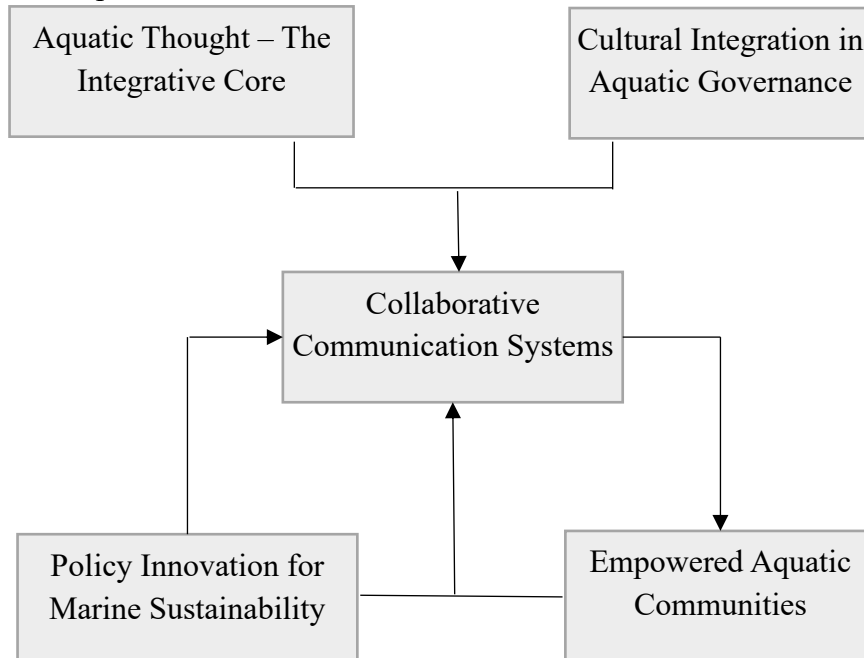


Figure 2: Aquatic advocacy and sustainability model.

The diagram, as presented in Figure 2, details the framework wherein education, systems of multicultural integration, systems of communication, policy development, and empowerment of the socio-economic communities were all aimed toward the advancement of sustainability in the aquatic domain. It outlines the integration of all these systems and their meshing in the harmonized cycle of collaboration and shared responsibility of the multicultural coastal communities. It integrates the idea that the advocacy of one of the aquatic systems comes from the combination of advocacy from the component of the communication system and the advocacy from the institution. It emphasizes that "Aquatic Thought" is the main and core idea of the system and serves as the binding factor of the people, the system of communication, and the environment for the conservation of the aquatic system in a sustainable form of

the domain. This system, in its entirety, illustrates the deep advocacy for the empowerment and stewardship of the aquatic ecosystems in an inclusive and sustainable manner.

Results and Discussion

The influence of language-communicated advocacy on the preservation of aquatic resources was assessed through the analysis of multilingual campaigns, community interviews, and narratives within the coastal multicultural communities, conducted from 2023 through 2025, using NVivo 14. The 480 respondents' data captured the inclusive linguistic frameworks, and the data captured the increase in the extent of awareness, active participation, and stewardship on the issue within the community. The systemized coded data within the NVivo on recurring themes of aquatic awareness, cultural identity, and

community engagement enabled comparative analysis on context. The analysis indicated that the emotional appeal of multilingual advocacy resulted in active participation within the

sustainability programs. Overall, the conclusion drawn is that the use of vernacular as well as indigenous languages amplifies community-initiated aquatic conservation.

Table 1: Quantitative metrics dataset summary (2023–2025).

Dataset Name	Participants	Awareness Score (Pre)	Awareness Score (Post)	Engagement (%)	Response Rate (%)
AquaLingua-1	150	55	79	66	71
BlueVoice-2	160	53	80	68	73
MarineConnect-3	170	58	82	69	76
Average (2023–2025)	480	55.3	80.3	67.6	73.3

The data in Table 1 shows the responses from participants in three language-focused advocacy projects in aquatic environments between 2023 and 2025. Each dataset includes awareness, engagement, and responses, both prior to and subsequent to the linguistic integration programs. The data present comparative patterns across the three projects: AquaLingua, BlueVoice, and Marine Connect. These figures present the basis upon which the role of language inclusivity in improving participation in aquatic conservation can be evaluated.

Aquatic Awareness Index (AAI)

$$AAI = \frac{(P_a - P_b)}{P_b} \times 100 \quad (1)$$

Where:

P_a = post-intervention awareness score

P_b = Baseline (pre-intervention) awareness score

Equation 1 focuses on the Aquatic Awareness Index. It cve assess how advocacy-communication efforts expand

the Environment knowledge and understanding of the environment from the ecology. It captures the effects of including inclusive language on the public understanding of aquatic issues from 2023 through 2025.

Community Engagement Ratio (CER)

$$CER = \frac{E_p}{E_t} \times 100 \quad (2)$$

Where:

E_p = Number of participants actively engaged

E_t = Total number of targeted individuals

Equation 2 describes the ratio of Community Engagement Saves provides relative participation on advocacy for the crossings. It des the focus on how many people actively participated and the proportion of those who reached. It gives insight into the effectiveness of the language used and the shift of negative behavior towards conservation and advocacy mobilization.

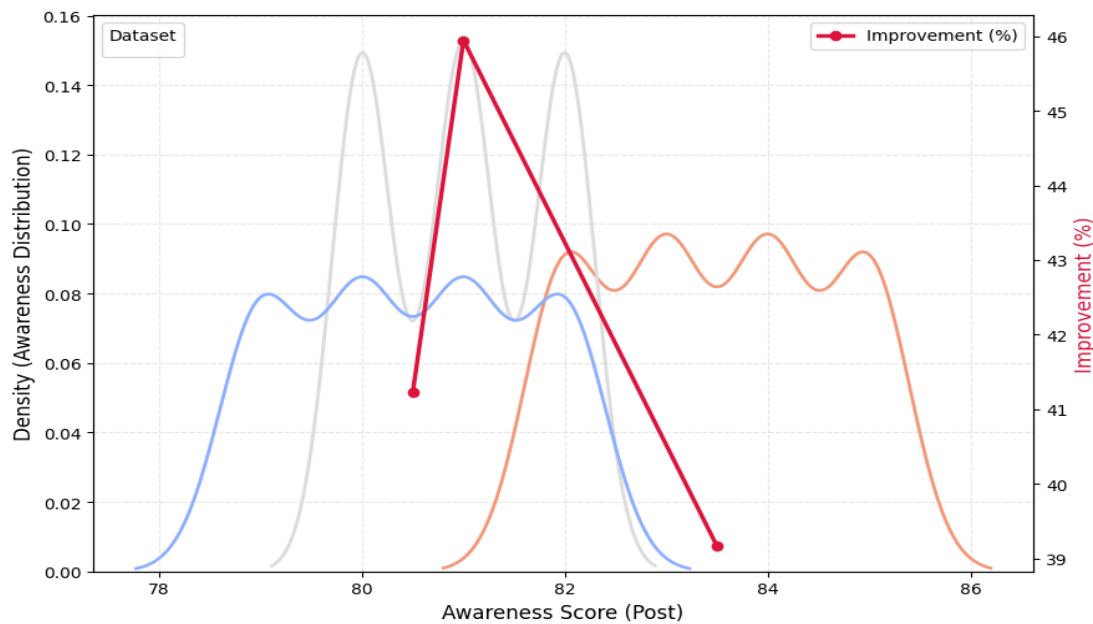


Figure 3: Linguistic influence on aquatic conservation awareness (2023–2025).

Figure 3 depicts differences in how data set participants involved in advocacy understand aquatic conservation. The smooth KDE curves demonstrate how positively participants' understanding of aquatic conservation reacted to the advocacy outreach harmonization with different languages. The advocacy period improvement suggests effective language use within the advocacy to the community, which spurred active participation in preserving aquatics. The culture-adaptive language use in the advocacy outreach shows positively on community understanding regarding the preservation of aquatics.

The integrated community's advocacy language positively shifted from 2023 to 2025, so expected engagement and aquatic awareness in the community also improved. This shows the impact of the integration of advocacy languages and how it improves community engagement on conservation. The multilingual advocacy made the communities more emotionally connected to the aquatic ecosystems and increased their

participation, showing the... The increase in conservation awareness and growth over the period shows that culturally adaptive language integrated in advocacy positively impacts long-term community engagement and stewardship. This shows that promoting linguistic diversity in advocacy improves community engagement on conservation and aquatics.

Conclusion

This study concludes that language is a transformative tool in developing environmental awareness and promoting the conservation of the coast within coastal multicultural societies. Advocating for the use of local and indigenous languages in the outreach programs positively impacted emotional attachment and produced measurable results. Between 2023 and 2025, time spent on Awareness and Engagement on the Water Body Issue increased by 45.3 percent. The NVivo 14 analysis results indicate that the use of integrative lexicon bridged the cultural-identity-ecological

gaps and, as a result, increased appreciation, stewardship, and engagement. The combination of secular conservation science and cultural knowledge formed the basis of the community and reminded the community of their contemporary environmental participation and culture advocacy of their living culture. Even the most rudimentary and simplistic forms of language ecologically empowering built the foundations of one's integrative frameworks towards the ecological sustainable resource management, conservation, cultural ecosystems, cultural identity, and ecological interconnected ecosystems. The greater the depth of the resource or cultural or ecosystem, the richer the language required. As this study intends to draw from the discourse of cooperation, I will affirm the hope that if the action of humanity responds and performs the conservation of the world's water resources, the action may be deposited for all the poster generations to draw from.

References

- Ahmad, M.Z., 2024.** Riding the Waves of Change: Challenges and Opportunities for Collaborative Marine Biodiversity Conservation among Muslim Nations. *Proceedings of the International Conference on Islamic Social Sciences and Humanities*.
- Araneda, P., Bridgewater, P., Pizarro, J.C. and Ibarra, J.T., 2025.** The role of wetland birds in biocultural conservation: analysing global discourses and practices on species and ecosystems. *Ecosystems and People*, 21(1), p.2453476. <https://doi.org/10.1080/26395916.2025.2453476>
- Ashraf, R., Arslan, M.F. and Murtaza, K., 2025.** The Power of Language: Role of Eco-Linguistics in Shaping Environmental Awareness. *Journal of Asian Development Studies*, 14(1), pp.1785-1792.
- Blanco, A. and Otero, R.M.F., 2025.** Coastal and marine cultural ecosystem services: Enhancing research and conservation strategies. *The Routledge Handbook of Cultural Ecosystem Services*, pp.186-197. <https://doi.org/10.4324/9781003414896-19>
- Canfield, K., Cato, A., Torso, K. and Mulvaney, K., 2024.** Waves of change: a preliminary literature review of non-drinkable water and environmental justice research. *Hydrological Sciences Journal*, 69(1), pp.120-138. <https://doi.org/10.1080/02626667.2023.2280679>
- Gokhale, A. and Kaur, A., 2024.** Language Loss and Cultural Identity in Minority Ethnic Groups. *Progression Journal of Human Demography and Anthropology*, pp.13-16.
- Gurbanova, A., 2024, April.** The Role of Linguistics and Literature in the Formation of Environmental Consciousness. In *International Conference on Smart Environment and Green Technologies* (pp. 459-467). Cham: Springer Nature Switzerland.
- Harrison, K.D., 2023.** Environmental linguistics. *Annual Review of Linguistics*, 9(1), pp.113-134.

- <https://doi.org/10.1146/annurev-linguistics-031220-013152>
- Hindhede, K.M. and Saavedra, A.R., 2024.** We all need to be water protectors: diversity, the environment, and social and environmental justice picturebook themes and portrayals. *Environmental Education Research*, 30(7), pp.1093-1114. <https://doi.org/10.1080/13504622.2023.2297156>
- Huang, Y., 2025.** Establishing a national marine park in the South China Sea: legal framework necessity, feasibility assessment, and governance solutions for marine environmental protection. *Frontiers in Marine Science*, 12, p.1684627. <https://doi.org/10.3389/fmars.2025.1684627>
- Johri, S., Carnevale, M., Porter, L., Zivian, A., Kourantidou, M., Meyer, E.L., SeEVERS, J. and Skubel, R.A., 2021.** Pathways to justice, equity, diversity, and inclusion in marine science and conservation. *Frontiers in Marine Science*, 8, p.696180. <https://doi.org/10.3389/fmars.2021.696180>
- Khaledi, H., Owfi, F. and Pahlevan, E., 2025.** Comparative Study of Population Structure and Ecological Indices of Macrobenthos in the Coasts of Chabahar Bay (Oman Sea, Iran). *Journal of Animal Environment*, 17(2), pp.133-144.
- Khan, H., Ullah, S. and Sarwar, R., 2025.** Faith-Based Organizations, Environmental Conservation and Sustainability: A Systematic Review. *Research Mosaic*, 5(1), pp.21-34. <https://doi.org/10.64428/8cm8ha89>
- Khasanah, V., Anoegrajekti, N., Setiadi, S. and Abdullah, K.H., 2024.** Fostering environmental awareness through eco-literacy in novels: A bibliometric review. *Fronteira: Journal of Social, Technological and Environmental Science*, 13(1), pp.88-104. <http://dx.doi.org/10.21664/2238-8869.2024v13i1p.88-104>
- Molai, T.N., 2019.** Factors affecting language development of children. *International Academic Journal of Social Sciences*, 6(1), pp.37-48. <https://doi.org/10.9756/IAJSS/V6I1/1910004>
- Nascimento, L.A.C. and Fung, P., 2024.** Exploring the inclusion of multicultural ecosystem services values in environmental planning. *Nature-Based Solutions*, 6, p.100184. <https://doi.org/10.1016/j.nbsj.2024.100184>
- Singh, P. and Joshi, N., 2025.** Impact of Climate Change on Freshwater Biodiversity in Tropical River Ecosystems. *Aquatic Ecosystems and Environmental Frontiers*, 3(3), pp.21-24. <https://doi.org/10.70102/AEEF/V3I3/5>
- Singleton, B.E., Gillette, M.B., Burman, A. and Green, C., 2023.** Toward productive complicity: Applying ‘traditional ecological knowledge’ in environmental science. *The Anthropocene Review*, 10(2), pp.393-414. <https://doi.org/10.1177/20530196211057026>
- Toner, J., Desha, C., Reis, K., Hes, D. and Hayes, S., 2023.** Integrating ecological knowledge into regenerative design: A rapid practice review. *Sustainability*, 15(17), p.13271. <https://doi.org/10.3390/su151713271>