

A Tricontinental Study on Environmental Sustainability

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Research Article

Keywords:

Posted Date: September 10th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-10676674/v1>

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Additional Declarations: No competing interests reported.

Abstract

This study investigates Global South ecologies through a tricontinental literary lens, analyzing Amitav Ghosh's *The Hungry Tide* (Asia), Imbolo Mbue's *How Beautiful We Were* (Africa), and Liliana Colanzi's *You Glow in the Dark* (Latin America). It explores how these narratives depict environmental degradation, extractive colonialism, and social injustice, emphasizing the lived experiences of marginalized communities facing slow violence and climate vulnerability. Employing postcolonial ecocriticism, eco-feminism, and subaltern climate epistemologies, the paper positions literature as a repository of local ecological knowledge, ethical witnessing, and resistance. A Tricontinental Eco-Narratology methodology integrates comparative textual analysis, contextual grounding, narrative mapping, and ethical reorientation, augmented by GIS and text mining to link literary representation with empirical environmental evidence. The study highlights the alignment of these narratives with Sustainable Development Goals (SDG 13, SDG 5, SDG 15, SDG 4.7), demonstrating literature's role in fostering planetary pedagogy, ethical consciousness, and climate justice. By centering subaltern voices, the paper advocates a polyphonic, human-centered vision of sustainability that bridges moral responsibility, resilience, and cross-continental ecological awareness.

01. Introduction

Today, human beings find themselves at a crossroads with ecological collapse being no longer an unknown but a reality that is being experienced by millions of people and more so the people of the Global South [1]. Coastal erosion in South Asia, oil spills in Africa, and radioactive poisoning in Latin America are not the trends; they are day-in day-outs crises that drive people out of their homes, sicknesses, unemployed and/or even out of culture. The Global North usually discusses environmental issues as a concern with everybody involved, when in fact the greatest victims tend to be those who contributed the least to environmental degradation. Take the case of the countries that emit the fewest greenhouse gases, as they are also the ones that are the most hit by the climate change and resource mining. This is not an epistemic but a physical inequality as well, whose knowledge is appreciated, whose voices are listened to, and whose stories are told [2]. In fiction, authors in Asia, Africa, and Latin America develop counter-narratives that help highlight these disparities with some urgency that demands ethical hearing and legal intervention [3].

This paper will analyse three literary texts of the Global South Amitav Ghosh *The Hungry Tide* (Asia), Imbolo Mbue *How Beautiful We Were* (Africa), and Liliana Colanzi *You Glow in the Dark* (Latin America) in order to explore the use of storytelling as a way of resistance, survival and moral witnessing. Such works not only reveal the state of destruction of the environment but the ecology as the lived experience, which is conditioned by the memory, colonization, and the proximity of loss. Besides that, they articulate other ecological concepts that are challenging the current existing environmental discourse which is commonly located in the Global North [4]. This paper argues that these novels are closely interconnected and that they are actively involved in rebuilding the climatic gap through foregrounding voices, erudition, and morality of the Global South, with a tricontinental lens. They comply with United Nations Sustainable

Development Goals (SDG 13 in particular, Climate Action), SDG 10 (Reduced Inequalities), SDG 15 (Life on Land), and SDG 5 (Gender Equality) [5]. These objectives are not policy check boxes but they are also justice, memory and moral duty frameworks.

1. Theoretical Framework

This paper applies a multi-faceted theoretical approach to *The Hungry Tide*, *How Beautiful We Were*, and *You Glow in the Dark*, applying postcolonial ecocriticism, decolonial ecological philosophy, eco-feminism, and the concept of slow violence. All of these points reveal how power, history, and environmental degradation are fed off each other, and how the Global South ecological issues have human-centered implications.

Postcolonial ecocriticism explores how colonies, hierarchies of racism, and unequal development exert their influences on the environmental degradation and vulnerability [6]. Ecological degradation in many postcolonial countries is not only the by-product of natural affairs but is also enhanced by centuries of exploitation, land grabbing, and harvesting of resources. This view explains the deep mutuality of the ecological crises that disadvantaged groups of people have experienced in the past, including the Sundarbans inhabitants in *The Hungry Tide* or inhabitants of Kosawa in *How Beautiful We Were*, and historical and geopolitical injustices.

The concept of slow violence was developed by Nixon [7], this is environmental damage that occurs gradually and over time, without noticing it by anyone. Such violence that usually goes unnoticed in common debates of the environment is expressed through contaminated rivers, the-rise sea level, chronic chemical poisoning, and the impact of the extractive industries. Such damages are important to understand the actual circumstances in the lives depicted in the books, such as the gradual flood and erosion of the Sundarbans, decades of oil pollution in the fictional African town of Mbue, or the long-term effects of radiation in Bolivia in Colanzi. The slow violence connects the tendency to marginalize local people in global climatic discourses and highlights the need to have their voices heard in the environmental literature.

Using the works of theorists like Escobar and Ferdinand [8], decolonial ecological thinking assumes that the ecological problems cannot be discussed without alluding to the colonial and capitalist past. This perspective condemns technocratic and global solutions to climate change and promotes ecological knowledge and land care based on principle of situational and place-based ecology, indigenous land care and relational approaches to nonhuman beings. This viewpoint explains the ways local cosmologies, moral relations with the environment, and response by the community in the novels as means of resistance and survival.

Finally, eco-feminism introduces an element of morality and gender by demonstrating how environmental harm is more damaging to women and the vulnerable population than to men, and how women can be better ecological custodians [9]. Female characters often take a central stage in these

stories in making the human-nonhuman transition, in organizing the collective memory and adaptive responses to environmental stress.

Combining these frameworks, one can come to the reading of the three novels, which will be people- and ethics-centered. They position literature as an act of witnessing, resistance and imagination, according to which ecological disasters are not abstractions but facts in the flesh. The books are cultural artifacts and moral interventions, they enhance planetary justice, relation ethics, as well as recognition of historically marginalized environmental knowledge through their theoretical synergy.

02. Literature Review

This has been intensely stressed in recent scholarly literature as the need to contextualize environmental justice as a part of global power relations, especially in relation to the histories of suffering and struggle in the Global South [10]. This perspective has highlighted that ecological crises are not only material but very social, political and historical and are shaped by the colonialism, capitalism and unequal growth.

A. Slow Violence and Environmental Injustice.

Another concept, the concept of slow violence that is highly significant in the sphere of environmental justice, is developed by Rob Nixon and is concerned with the environmental harm that occurs gradually over the decades, but has a significant impact on the lives, health, and culture of the people [11]. In *The Hungry Tide*, Ghosh demonstrates how the weak ecosystem of the Sundarbans gets influenced by cyclones, high tides, and intrusion of saltwater. The lives of fisherfolk and honey collectors become increasingly difficult due to these changes, and this demonstrates that environmental changes can put people in a weak position regarding their social and economic statuses. Similarly, the case of the Marichjhapi Massacre with which Biswas and Channarayapatna discuss demonstrate that the state-approved process of conserving the environment causes harm to displacing refugees, demonstrating how environmental policies can be used to conceal social injustice [12].

B. Dual Perspectives: Global and Planetary

Dipesh Chakrabarty proposes thinking simultaneously in the register of the “global” (human history, capitalism, politics) and the “planetary” (geophysical processes, deep time, non-human forces) [13]. This duality is also observed in *How Beautiful We Were*; the Cameroonian village is affected by oil extraction of corporations that destroy the livelihood of the locals, but the planetary-level forces of pollution, deforestation and climate change put more pressure on the local complications [30]. Such dual scales are presented in literary form to predict the tiredness of human freedom in environmental processes that humanity cannot comprehend in order to bring out the ecological crises as complexly triggered.

C. Postcolonial Ecocriticism and Intersectional Injustice

According to postcolonial ecocriticism, the ecological narratives produced in the Global South usually challenge the Western-dominated conservation ideologies. In *The Hungry Tide* conservationist work favours the existence of rare species such as the Irrawaddy dolphins, to develop the marginalized human communities, implications of a conflict between biodiversity conservation and social justice [14]. On the same note, in *You Glow in the Dark*, the history of colonial uranium mining leaves the landscapes contaminated and the people broken by the radiation, demonstrating how historical exploitation can add to the current vulnerability [15]. These readings lay stress upon intersectional injustice, in which the issues of class, caste, gender and colonial pasts are combined with the destruction of the environment.

D. Feminist, Agency, and Ecological Knowledge

In these stories, women are often used as the types of intermediaries between the human society and nonhuman nature. In *The Hungry Tide*, women keep the traditional knowledge of the tides, fishing as well as medicinal plants and lead their families and communities to the environmental uncertainty. The mobilization of women through collective action against the oil companies is organized in *How Beautiful We Were*, which is a combination of ecological consciousness and social activism. Eco-feminism, in turn, emphasizes the ethical and gendered portion of the environmental justice and acknowledges that women are the ones, who are most often exposed to environmental degradation as well as the most important agents of care [9].

03. Gaps and SDG Alignment

Despite the emergence of rich case studies in ecocritical discourse, comparative scholarship that bridges Asian, African, and Latin American environmental literatures remains notably limited [16]. Most existing analyses are confined within region-specific or nation-based frameworks, thereby neglecting the transnational networks of ecological crisis, cultural resilience, and environmental justice that connect the Global South. Furthermore, while literary criticism increasingly gestures toward the United Nations' Sustainable Development Goals (SDGs) [31], systematic alignment with specific goals—particularly SDG 13 (*Climate Action*), SDG 6 (*Clean Water and Sanitation*), and SDG 15 (*Life on Land*)—is often assumed rather than critically interrogated [17, 31].

To seal these gaps, this paper will discuss this work by Amitav Ghosh in *The Hungry Tide*, Imbolo Mbue in *How Beautiful We Were*, and Shingirai Ruwizhi in *You Glow in the Dark*. It examines how such stories embody the interconnections between the ecological degradation, colonial past, and social injustices using postcolonial ecocriticism, ecofeminism, and theories of slow violence. The selected texts talk about the different but overlapping geographies, South Asia, Sub-Saharan Africa, and postcolonial Latin America and shed light on shared experiences of environmental vulnerability and shared strength. By use of the SDGs, they uncover the ethical and material facets of climate injustice, particularly seen to affect women, fisherfolk and Indigenous or local populations who become the custodians of ecological and cultural memory.

The focus on such underprivileged views in the study shows how literature is an epistemic field that is changing the experienced ecological crises into ethical and political awareness. This does not only expand the area of comparative environmental humanities, but also provides overall knowledge of sustainability based on empathy, reciprocity and justice. The cross-continental strategy focuses on the importance of the literature stories in advancing the transformative goals of SDGs in the current Global South.

A. The Hungry Tide (Asia)

The Hungry Tide (2004) by Amitav Ghosh is not just another geographic setting, but a living and threatening ecological being, which supports and opposes human life at the same time. The archipelago is the area with mangrove forests, brackish rivers, and tidal variations and becomes the living being that becomes volatile, conscious, and significantly tied to the rhythm of human life. Ghosh challenges the politics of knowing and not knowing by contrasting the scientific knowledge of a marine biologist, Piyali Roy with the illiterate wisdom of the fisherman, Fokir. The novel believes that indigenous modes of perception, namely the tactile, intuitive, and embodied experience, are not archaic expressions of the superstition but, in fact, alternative ways of knowledge, ecologically modified.

The myth of Bon Bibi, the protective goddess of the Sundarbans, encapsulates this epistemic plurality. It functions not merely as folklore but as a cosmological framework through which the precarious balance between human and nonhuman worlds is negotiated. In this spiritual ecology, vulnerability is not weakness but a mode of coexistence, and interdependence becomes a moral principle [18].

The novel also dramatizes how the rhetoric of “conservation” can reproduce colonial hierarchies. The Marichjhapi Massacre of 1979, a state-led eviction of marginalized Bengali refugees in the name of environmental protection, exposes the violence underlying technocratic approaches to ecology [19, 25]. Ghosh’s portrayal of cyclones, tidal surges, and loss foregrounds the social dimension of climate disasters, linking them to governance failures and historical displacement. In this sense, *The Hungry Tide* aligns with SDG 13 (Climate Action) and SDG 14 (Life Below Water) by exposing the ethical paradoxes of conservation and advocating for inclusive, community-centered environmental justice.

B. How Beautiful We Were (Africa)

A fictional setting of *How Beautiful We Were* (2021) by Imbolo Mbue is the fictional town of Kosawa, where oil drilling transforms the rural area into a gradually burning land of moral and environmental devastation. Poisonous spills have over the years contaminated rivers, farms and bodies, but the globe-based businesses are not ready to accept the blame. Mbue contextualizes this destruction with the entire neocolonial capitalism such that the markets of the world cause misery in localities. It is revealed in the book that environmental damage is not a natural accident but a political decision that is brought about by the absence of equal power, poor governance and exploitation of systems.

The intergenerational narration which incorporates children, mothers and seniors presents the fact that the community is in an ecological siege. The struggle of the villagers to survive, respect and justice is likened to how postcolonial Africa is coping with the extractive companies. The protagonist of the book Thula is transformed into a witness of a revolution and grows up. Her activism indicates how depression can become resistance. Mbue situates eco-feminism in an African context with her: women as caretakers, memory keepers, of the ecological, change agents.

Throughout the story, it is evident that systemic inequalities are related to environmental damage in Africa. It has been a mix of SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action), and SDG 16 (Peace, Justice, and Strong Institutions). Mbue transforms fiction into a song of environmental justice because he denotes people whose voices were previously suppressed. She demonstrates how slow violence of pollution consumes both the future and nature around us [20].

C. You Glow in the Dark (Latin America)

In Liliana Colanzi's *You Glow in the Dark* (2023), ecological trauma assumes spectral form. Set across Bolivia's irradiated landscapes, her stories fuse the mythic with the scientific, making radiation both literal and symbolic—a residue of colonial extraction and a haunting metaphor for what modernity tries to forget. The Latin American eco-gothic aesthetic created by Colanzi re-configures contamination as a palimpsest of colonial violence embracing the past glowing through the present [21].

Her characters exist in a state of decay, but the accounts are vibrating with survival and resistance. It is a glow that turns out to be an image of ambivalence; toxicity and vitality, death and illumination. Interweaving gendered bodies and ecological toxicity shows how women and indigenous people disproportionately receive the blame of environmental failure. Disease, sterility and corporeal suffering are not metaphoric experiences of a toxic world, but real experiences.

Colanzi's fiction, therefore emphasizes on SDG 3 (Good Health and Well-Being) and SDG 13 (Climate Action) by dramatizing how the postcolonial Latin America still struggles with biopolitical impacts of extraction. The scope of her tales spreads ecofeminist issues into the nuclear era, in which radiation serves as a posthuman prompt on entanglement; between life and death as well as the afterlife of persisting empire.

Table 1

(Thematic Intersections Between Selected Texts and the Sustainable Development Goals, *Developed by the author, 2026*)

Text	Extract	Theme / Concept	SDGs	Insight
Ghosh, 2004	"The tides reach into the very heart of the land..."	Tidal ecology, precarity	13, 14	Survival relies on adapting to nature's flux
Ghosh, 2004	"Bon Bibi protects the poor from the tiger..."	Myth, eco-spirituality	16	Myth critiques conservation injustice
Mbue, 2021	"The children were dying, and the land was no longer ours."	Slow violence, dispossession	6, 13	Shows corporate exploitation and complicit governance
Mbue, 2021	"Thula told us that fighting for the land was fighting for ourselves."	Eco-feminism, resistance	5, 13	Highlights women's activism and intergenerational resilience
Colanzi, 2023	"The glow was the memory of a world that refused to die."	Radiation, postcolonial memory	3, 13	Contamination as historical trauma; resilience ethic
Colanzi, 2023	"We carry the light of those who vanished before us."	Indigenous memory, resilience	13, 15	Celebrates ecological remembrance amid devastation

synthesizes textual motifs from *The Hungry Tide* (Ghosh, 2004), *How Beautiful We Were* (Mbue, 2021), and *You Glow in the Dark* (Colanzi, 2023) in relation to the United Nations Sustainable Development Goals (UN, 2015) [31].

04. Comparative Discussion: Shared Tropes of Resistance

Throughout *The Hungry Tide* (Ghosh, 2004), *How Beautiful We Were* (Mbue, 2021) and *You Glow in the Dark* (Colanzi, 2023), there is a network of shared motifs: each finding words to describe the opposition to ecological and historical oppression and imagining other ways of co-existing [22]. These tropes indicate not only the similarities of the Global South; but also, the fantastical actions of writers to reclaim their agency, voice, and environmental ethics.

4.1. Extractive Colonialism and Enterprising Economies

The three texts anticipate the continuation of resource colonialism in the form of domination of land, water and life under the regimes of exploitation that replicate or extend the imperial authority. The conflicts about ownership of the shifting islands of the Sundarbans in *The Hungry Tide* reflect more general struggles of postcolonialism that surround sovereignty and belongingness. Conservation rhetoric by the state helps to displace refugees, repeating the hierarchies of control that were already in place before them [19]. Equally, in *How Beautiful We Were* the multinational oil company providing operations in Kosawa also acts as a neo-imperial force, with its pipelines representing physical intrusion

as well as epistemic domination. The poisoning of rivers and disappearing farmlands by the villagers reveal how development turns to be a language of dispossession.

In *You Glow in the Dark*, Colanzi gets this argument into the nuclear and post-industrial period: radioactive pollution is not the singular disaster; but the manifestation of the same logic that reduced Latin America to a place of excavation. The radiation light becomes a symbol of the untouchable heritage of the history, when the territory is still exploited and the formal decolonization has taken place. The combination of these stories shows that extractivism (be it of oil, land or minerals) is the modern aspect of colonial power and challenges readers to address the moral economies that have formed the basis of environmental destruction.

4.3 Slow violence and climate insecurity

Both texts make environmental suffering a kind of slow violence [7]; incremental, not always obvious harm, that occurs between generations. Ghosh is able to locate climate change in the framework of experiential histories of displacement, poverty and state abandonment by describing floods, tidal surges and erosion in the Sundarbans. Mbue transfers this slow violence to the idiom of the body; toxic blood, sterile soil, familial sickness that represent the non-decomposing long life of corporate avarice. This is literalized by Colanzi in his irradiated landscapes, which demonstrate the way half-lives of radiation degrade the differences between past, present and future as well.

In all three, vulnerability is not portrayed as passive suffering but as a site of political critique. By narrativizing climate precarity, these authors reclaim the temporalities of crisis—refusing to confine environmental trauma to singular “disaster events.” Their storytelling itself becomes an act of resilience, a form of temporal resistance against the erasures of capitalist modernity.

4.3 Mother-Tongue and Revolt of Cosmology.

The second thread that can be used to connect these stories is the healing of indigenous ways of seeing and knowing the universe as a resistance. In *The Hungry Tide*, Bon Bibi myth is an ecological ethic whereby human beings and nonhumans depend on each other to survive. This mythical order is the opposite of the instrumental rationality of scientific modernity, and this cosmology is based on the balance and moderation.

In the Latin American settings of Colanzi, ecological consciousness is filled with ritual and commemoration by indigenous spiritualities and ancestral beliefs. The witnesses of the trauma and resiliency are spirits, ancestors, and land deities. These cosmologies dispute the Western distinction between nature and culture and in so doing highlight the fact that knowledge about ecology is not entirely the preserve of science but an overall heritage, informed by narrative, and memory and practice of the ritual. These depictions revisit knowledge as a resistance mode, which is likely to reflect epistemic justice inducted by SDG 13 (Climate Action) and SDG 15 (Life on Land) [23].

Table 2

Comparative Tropes of Ecological Resistance in Global South Literature, *Developed by the author, 2026*)

Theme	Ghosh (2004)	Mbue (2021)	Colanzi (2023)	Shared Insight
Extractive Colonialism	Sundarbans land conflicts; state-led displacement	Multinational oil as neo-imperial force; poisoned rivers	Nuclear/post-industrial exploitation; radioactive pollution	Modern extractivism as colonial continuation; critique of moral economies
Slow Violence	Floods, erosion; displacement histories	Bodily harm, toxic soil, family sickness	Irradiated landscapes; temporal erosion	Environmental harm is incremental; storytelling as political resistance
Cosmology & Indigenous Knowledge	Bon Bibi myth; human–nonhuman interdependence	N/A (focus on social/industrial harm)	Indigenous rituals and ancestral spirits	Ecological knowledge as resistance; epistemic justice aligned with SDG 13 & 15

Analysis

Synthesizes recurring motifs across the three novels, aligning thematic resonances with relevant United Nations Sustainable Development Goals (UN, 2015).

05. SDG-Based Interpretation and Educational Implications:

On the one hand, it is impressive when the issues of these novels are overlaid onto the Sustainable Development Goals. *The Hungry Tide* addresses SDG 13 (Climate Action) regarding the rising sea levels, erosion and the necessity to adapt to it; it addresses SDG 15 (Life on Land) and SDG 14 (Life Below Water) due to its interest in mangrove ecosystems, riverine biodiversity and the coexistence of the human communities with frail non-human life [2]. *How Beautiful We Were* overlaps greatly with SDG 3 (Good Health and Well-Being), SDG 10 (Reduced Inequalities) and SDG 5 (Gender Equality), because the phenomenon of sickness, loss and exclusion is brought into light as socially mediated by corporate power and gendered vulnerability. *You Glow in the Dark* raises some urgent questions regarding responsible consumption and production (SDG 12); the question of the ethics of waste, toxicity and colonial afterlives.

These novels provide effective, experiential and moral rather than factual means of teaching the sustainability concept educationally. Literature classes can also introduce such stories through SDG 4.7 (Education for Sustainable Development) to enable students to sympathize with the communities that are usually in the shadows of environmental policy. They challenge critical thinking on concerned knowledge and how the policy can be made more enlightened using local, indigenous, gendered knowledge. At Centurion University or other institutions, integrating these texts into curricula can

contribute to students' ecological literacy and ethical awareness, helping produce not just literate citizens but empathetic actors.

06. Conceptual Innovation: Subaltern Climate Epistemologies

Still, global technoscientific and neoliberal ideas originating in the Global North continue to dominate modern discourses of the environment. These concepts concentrate on carbon measures, technology alleviation, and policy ways of reasoning, yet neglect the experience and knowledge of the marginalized people. This corrosion of epistemic colonialism, characterized by the continued oppression of subaltern epistemologies and the ecology, is dangerous due to the preponderance of rationalist, data-driven methodologies. In this regard, this paper introduces the concept of Subaltern Climate Epistemologies, focusing on the ecological epistemologies, narrative cultures, and cultural memories within the lived experiences of historically marginalized communities.

This paper assumes that the literary works of Amitav Ghosh, Imbolo Mbue, and Liliana Colanzi make fiction an epistemic space a repository where subaltern communities reveal ecological insights that challenge the hierarchy of knowledge in the world.

The fragile ecology of the Sundarbans, which is used in *The Hungry Tide* (2004) by Amitav Ghosh, is a small world where the topics of climatic vulnerability, displacement, and postcolonial inequity can be discussed. Ghosh describes the indispensability of the relationship between environmental destruction and historic settings of imperial and developmental exploitation that continue to play out in the Global South in terms of the tensions between conservation and livelihood. Reconceptualizing the climate change not as the scientific event but as the historical and moral phenomenon rooted in the colonial experiences of expropriation and marginalisation, his narrative factors in the expropriation and marginalisation. *The Hungry Tide*, thus, indicates a historical consciousness that is required to make the Anthropocene an extension of the so-called Colonialocene [24].

How Beautiful We Were by Imbolo Mbue (2021) is the story of a fictional African town known as Kosawa that opposes the international oil companies. This exhibits the human price of petro-capitalism. Mbue re-imagines agency and resilience as collective, relational and strongly ecological based on the oral story, community resistance and intergenerational memory. Her writing reveals subaltern mode of knowledge that climate knowledge is based on lived experience, family relationships, and a sense of moral responsibility towards the earth rather than laboratories and satellites.

In *You Glow in the Dark* (2022) by Liliana Colanzi, this notion is extended by speculative and posthuman fiction set in Bolivia, the aftermath of nuclear pollution is connected by the author with indigenous cosmologies and haunting. The merging of the supernatural and the environmental issues West dichotomies including science and spirituality, life and death, human and non-human are merged by Colanzi. Her accounts suggest that the subaltern knowledge is dynamic as opposed to fixative and backward-looking, even speculative [22].

All these writers show that literary narratives are stores of subaltern ecological knowledge which give counter-discourses to dominant environmental ideologies. The concept of Subaltern Climate Epistemologies refreezes the understanding of climate as multi-faceted, localized, and interwoven-grounded on the histories of colonial relations and resistance to it. The approach will be helpful in building a decolonial ecocriticism that accepts narrative, memory, and spirituality as modes of environmental discourse [27, 28].

By centring these voices, this study advocates a shift from the epistemic monopoly of the Global North to a polyphonic climate discourse, where indigenous, local, and postcolonial perspectives collectively redefine what it means to know, feel, and respond to the climate crisis.

07. Methodological Framework: Tricontinental Eco-Narratology

Building upon the conceptual groundwork of 'Subaltern Climate Epistemologies', this study adopts a Tricontinental Eco-Narratology as its methodological framework. The term refers to a comparative, cross-continental mode of analysis that bridges Asia, Africa, and Latin America through the lens of ecocriticism, postcolonial theory, and narrative studies. This method acknowledges that environmental crises, even though they have a global dimension are lived and told through local histories, cosmologies and material conditions.

The Tricontinental Eco-Narratology focuses on the idea of de-colonizing the environmental discourse through the identification of literary narratives within the context of geopolitics, ecology and culture. It dwells on narratives as a mode of ecological inquiry, the examination of how the framework of narrative myth, realism, oral tradition or speculative fiction enables human and nonhuman worlds to interact. The paradigm defeats Western environmental paradigms, since it accommodates many epistemologies of nature.

The elements of methodology used in this framework are:

1. Comparative Textual Analysis- An intensive reading process of the chosen texts (*The Hungry Tide*, *How Beautiful We Were* and *You Glow in the Dark*) with a goal of locating the issues that are combined into one resistance, displacement, and ecological awareness
2. Contextual Grounding- Placing any text in a socio-historical and ecological context; the Sundarbans (Asia), oil extraction in Africa, and post-industrial Bolivia (Latin America).
3. Narrative Mapping - Following narrative strategies (polyphony, chronological stratification, mythic re-creation) of coming to know the connection of strength and trauma in the environment
4. Thematic Convergence -Determining overlapping subaltern ecological imaginaries, which disrupt extractivism and colonial epistemologies
5. Ethical Reorientation - The presentation of literature as a form of dialogue of ethical reconnection with the world that is founded on justice and relationality as well as decolonial empathy

The approach of this triangulated analysis covers local and the planetary domains indicate how subaltern voices can be used to express an ecological consciousness on a global scale that cannot be easily brought into homogenising discourses of climate change. This diverse method of comparing literature and ecocriticism provides a more detailed, interdisciplinary approach to environmental humanities.

08. Data-Driven Supplement: Literature as Environmental Evidence:

In order to enhance the empirical rigor of the study, this research uses a data-driven supplement, putting literature not only as a narrative artifact but also as source of environmental evidence. This method reflects recent developments in digital and environmental humanities, where computational methods cover traditional literary analysis. By analyzing texts using quantitative and spatial tools, this study uncovers patterns, trends, and correlation there by providing a multidimensional understanding of ecological narratives.

Significant points in it are:

1. Text Mining and Computational Analysis - Natural language processing (NLP) and text mining are applied to identify themes of environment, which are repeatedly discussed in literature. Other themes that come into being are, depletion of biodiversity, natural disasters, and how the indigenous people understand their environment around them. The frequency counts, co-occurrence networks, and semantic mapping is something that can be used to see the patterns that are inter-related throughout the three novels.
2. Mapping using Geographic Information Systems (GIS)- This is a mapping technique where real world locations that are used as reference in the novels are mapped using GIS. [26] It makes it possible to have a spatial relationship between stories created and actual environmental data that exists in the real-world scenario, including the rate of deforestation, flood-prone regions, or polluted environments.
3. Multimodal Synthesis: The synthesis of text and spatial information forms an entire analysis that displays the ways in which literary narratives are a reflection of the environmental facts as well as are comprehension of the environmental facts. This links qualitative literary research to quantitative environmental data, in order to understand subaltern ecological knowledge better.
4. Comparative Insights (Cross-Textual) - The analysis of data across three novels: '*The Hungry Tide*', '*How Beautiful We Were*', and '*You Glow in the Dark*', elucidates the similarities and disparities regarding environmental issues across various regions, as well as the differences in narrative approaches concerning ecological concerns.

Table 03

(Data-Driven Methodological Supplement: Literature as Environmental Evidence, *Developed by the author, 2026*)

Method	Purpose/Focus	Tools/Techniques	Examples from Texts
Text Mining & NLP	Identify recurring environmental motifs, themes, and semantic patterns	Python (NLTK, spaCy), Voyant Tools	Natural disasters, ecological degradation, indigenous knowledge references
GIS Mapping	Map real-world locations mentioned in novels; correlate with environmental data	ArcGIS, QGIS, Google Earth	Flood zones of Sundarbans, oil-extraction sites, post-industrial Bolivian landscapes
Co-occurrence & Network Analysis	Reveal interconnections between ecological concepts and narrative elements	Gephi, Python NetworkX	Links between community resistance, resource extraction, and ecological loss
Cross-Textual Comparative Analysis	Identify shared and divergent ecological concerns across texts	Data visualization, charts, and thematic mapping	Comparative motifs of climate vulnerability, extractivism, and resilience
Multimodal Synthesis	Integrate qualitative literary insights with quantitative environmental evidence	Combined GIS & text visualization platforms	Overlay of narrative representation with environmental realities

Analysis

This table portrays the data-driven supplement incorporated in the study, that demonstrates how computational tools and spatial analysis enrich traditional literary analysis. By combining text mining, GIS mapping, network analysis, and multimodal synthesis, the study positions literature as a valid source of environmental evidence, bridging qualitative and quantitative approaches.

09. Future Directions: Planetary Pedagogy and SDG Integration:

It is theorized that the proposed study will bring a paradigm change in environmental education and envisioned as planetary pedagogy, a learning theory that places knowledge in the space of the interrelations within the Earth system. The environmental stories of Amitav Ghosh (*The Hungry Tide*), Imbolo Mbue (*How Beautiful We Were*), and Liliana Colanzi (*You Glow in the Dark*) allow the teachers to offer students a multi-scalar perception of climate change, which could be enhanced by studying ecological interdependencies at the local, regional, and global levels.

This approach is directly associated with the United Nations Sustainable Development Goal 4.7 where education is valued as important in creating sustainable development, becoming a global citizen, and valuing cultural diversity. The inclusion of literature illustrating the social and environmental realities of Asia, Africa, and Latin America is used to make students realize how various communities perceive,

experience, and respond to environmental issues. It does not only contribute to a better knowledge of literature and culture, but also facilitates critical thinking, moral judgment, and compassion with the environmental issues faced globally.

A paradigm of planetary pedagogy helps teachers adopt multidisciplinary pedagogical models, which include literary studies, environmental science, and social justice studies [29]. An example is the analysis of narrator descriptions of gradual violence, or resource overexploitation, or ecological expulsion, and Correlations of these literary outcomes to modern climate policy and sustainability.

The paper will also concentrate on the approaches of incorporating indigenous and local ecological knowledge into the curriculum. Knowledge of environmental practices and ecological wisdom that are included in a culture can assist individuals in learning and dissolve the hierarchy of knowledge. This is consistent with the general objectives of decolonization of education and promotion of an inclusive epistemology, whereby solutions to the environmental issues are informed by varied opinions and community-based knowledge systems.

Planetary pedagogy would generate global consciousness and direct students to the place-based learning. It does not only make the student reason critically on how the people relate to the natural world, but also provides the learner with the power to act to save the environment, which bridges the gap between theory and practice.

Conclusion

The Global South voices, as seen in *The Hungry Tide* by Amitav Ghosh, *How Beautiful We Were* by Imbolo Mbue, and *You Glow in the Dark* by Liliana Colanzi, are not limited to the literary domain; they are ethical and epistemological intrusions into the discussion on the climate change, environmental justice, and global sustainability. These narratives challenge that environmental matters are neutral, which underpins the general climate policies they are oriented to the Global North. They demonstrate that environmental catastrophes are directly connected to the colonial history, corporate domination, and the existing global inequalities. They focus on the real-life experience of communities experiencing degradation of the environment, displacement and marginalization in society, experiences that are sometimes ignored in the policy paradigms or technocratic versions of sustainability. When these stories are listened to, scholars and practitioners are reminded that environmental events can never be natural and that they are social, historical, and moral as well.

Yet these works do not simply exhibit suffering, they offer frameworks of hope, resilience and moral creativity. They discuss cosmologies that keep people down the earth rather than up the sky. This promotes relational ethics, intergenerational accountability and profound sense of interconnection of everything. They celebrate common memories, wisdom of the community, methods of resisting, which are ethical, enduring, and highly attached to the place. These books conceptualize the healing to be an ecological restoration as well as social and cultural restitution and propose the indivisibility of justice and sustainability.

These literary voices are demanding a radical change of climate and development agenda in the world where Northern agendas have taken over, where carbon trading markets have been replaced by donor-based conservation programs. They desire systems where justice is prioritized over profit, the relationship over extraction, and as well as survivance over silence. Linking this to the United Nations Sustainable Development Goals (SDGs) would make policy objectives moral requirements. Goal 13 on climate action (SDG 13), Goal 10 on eradicating inequality (SDG 10), Goal 16 at supporting peaceful and inclusive societies (SDG 16), and Goal 4.7 on education sustainable development (SDG 4.7) are not isolated goals and objectives but rather all a larger moral responsibility. With literary lenses to these aims, teachers, scholars, and policy-makers can create a more holistic vision of sustainability of the one that places human dignity, ecology, and the issue of moral implication of global disparities.

The area has much room to research more. Archival research, oral histories and fieldwork in the communities covered by these novels would contribute to a richer comparative eco-literary writing, and in so doing, understanding of the lived experience of environmental injustice. The impact of narrative structures on climate ethics, the motivation of ethical behaviour, and development of empathy can be explained using the interdisciplinary approach that combines literature, environmental science, anthropology, and policy studies. Planetary pedagogy in the context of teaching provides students access to the true experience of global connectivity, local history, and moral responsibility, transforming such abstract concepts as sustainability into life experiences that have moral significance and matter.

Ultimately, Asian, African and Latin American literature can provide an insight that cannot be fully captured by any model, report or policy paper. Technology of sustainability, such as its markets, infrastructure, and engineering solutions is often brought to the Global North. The Global South composes its conscience, its moral imagination, its ability to visualize fair futures in its turn, however. These tales are a very good reminder that action on climate change is not merely a technical matter, but also a moral and ethical matter. To hear these opinions, it is necessary to listen to the stories, challenges, and experiences of the most affected people. It also implies knowing how to understand that sustainability is not to be measured only in tons of carbon removing, but lives saved, cultures saved as well as ecosystems honoured.

We ensure that putting these voices in the front holds that environmental justice is connected to social justice, historical responsibility and moral responsibility. The novels in question assist us in locating our path into a better, more compassionate, and more tolerant world. They say the war against climate change must be global and very local, be founded upon technology and also be directed by the ethical considerations yet be also concerned with the people. Through such literary interventions, we learn to imagine and enact sustainability not as a form of abstraction, but as an ethical, relational and human-centred program and initiative, one that could eventually move the Global South into the higher moral compass of the world.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors do not have any competing interests to declare.

Funding

The authors did not receive any funds to write and publish this study.

Author Contribution

M.P., S.D. and R.G. contributed equally to the conceptualization, methodology, writing, editing and preparation of the manuscript. All the authors have read and approved the final version of the manuscript.

Data Availability

Publicly available in a repository: The datasets analyzed during the current study are available from the corresponding author on reasonable request. The publicly available Global SDG Indicators Database used in this study is available from the United Nations Statistics Division at <https://unstats.un.org/sdgs/indicators/database/>

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Figures

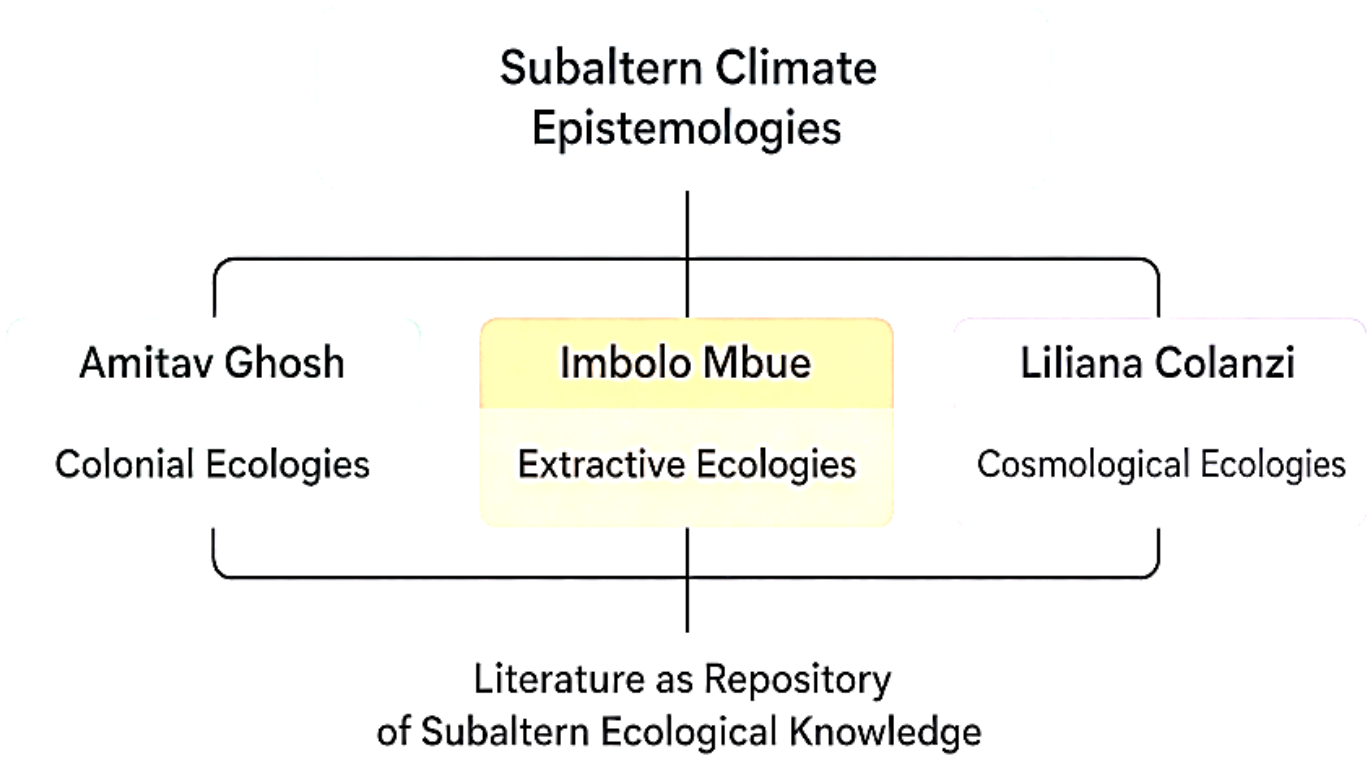


Figure 1

Conceptual Framework of Subaltern Climate Epistemologies in Ghosh, Mbue, and Colanzi, *Author's own elaboration, 2026*

Literary-Environmental Analysis Methodology

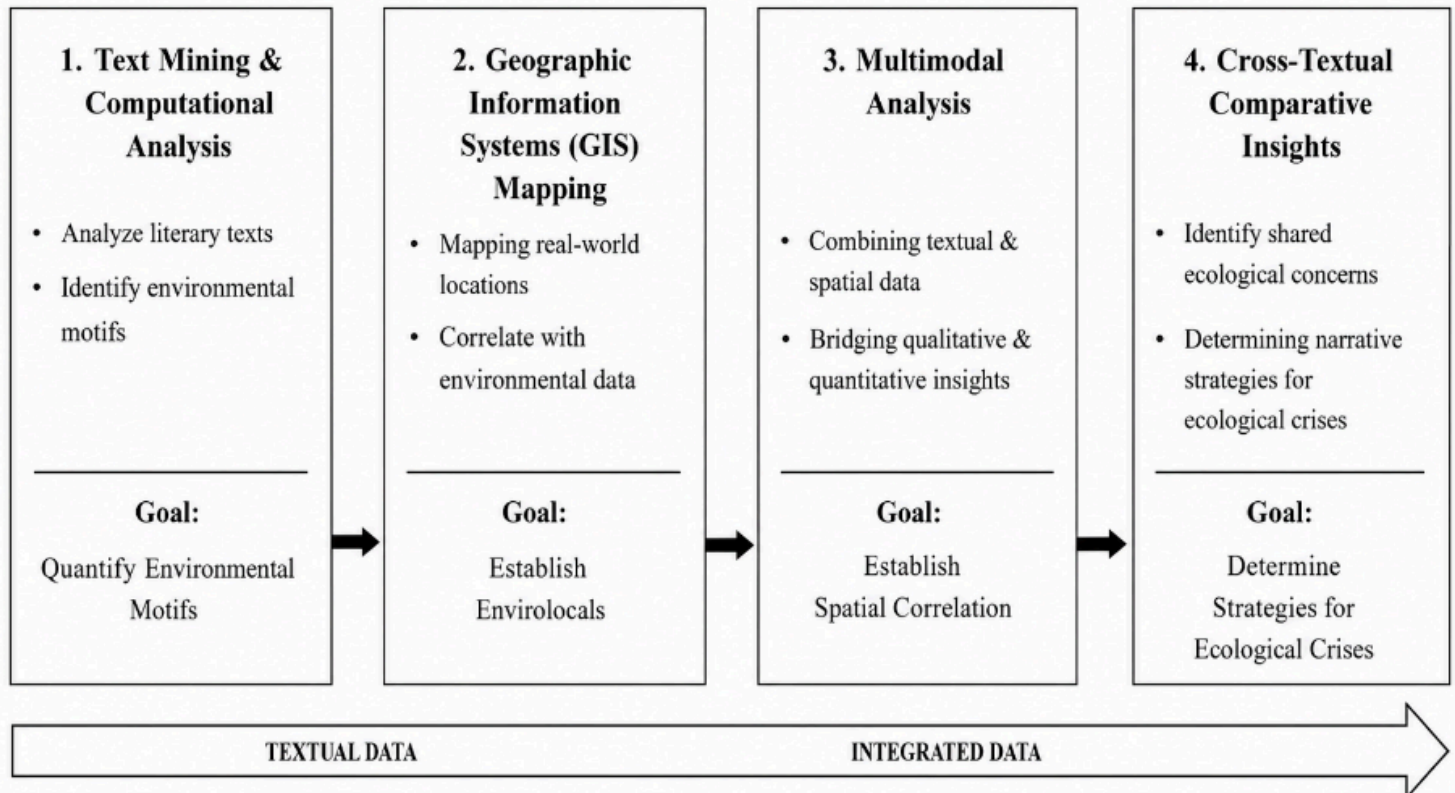


Figure 2

Robust Understanding of Ecological Narratives, *Author's own elaboration, 2026*

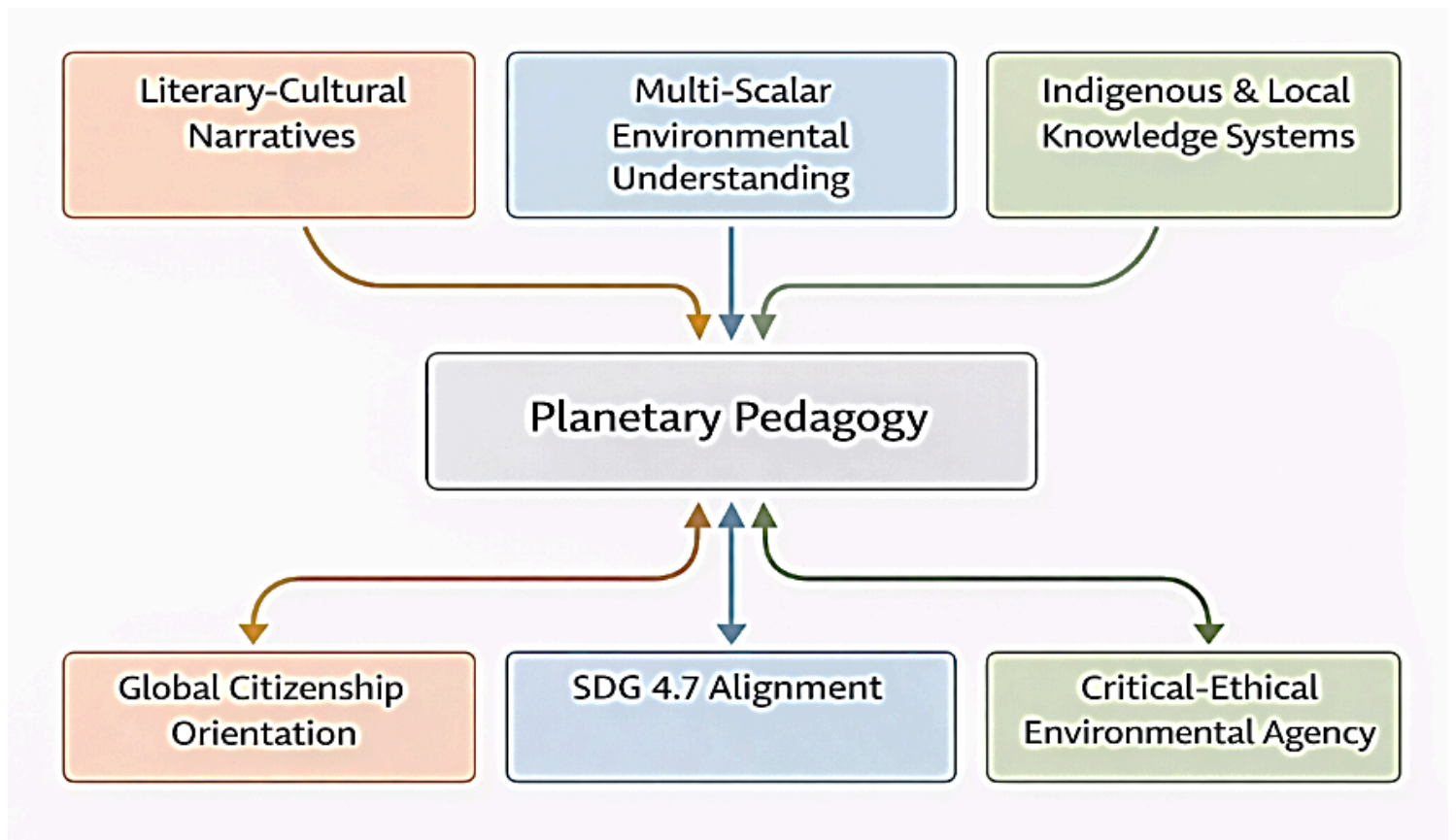


Figure 3

Integrative Model of Planetary Pedagogy and SDG-Based Curriculum *Author's own elaboration, 2026*