

Nature's #MeToo: Testimonies of Ecological Abuse

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Abstract

In 2017, the tale of sexual assault via a tweet by Alyssa Jayne Milano, an American actress cum activist, revolutionised not only feminism but also the #MeToo movement, which took centre stage in social media reckonings like wildfires worldwide by naming and shaming the perpetrators of violence against women. But what about Nature's #MeToo? Are there any whispers regarding violence and ecological abuse in the wilderness? This study probes the metaphorical and material parallels between the #MeToo movement and environmental justice struggles. To achieve this, the commentary attempts to reimagine ecological degradation as a form of systemic abuse—where silenced landscapes, exploited ecosystems, and marginalised communities bear witness to extractive violence. Drawing on interdisciplinary sources including ecofeminism, Indigenous epistemologies, and environmental law, the study foregrounds “testimonies” from polluted rivers, deforested hills, and displaced populations to interrogate the politics of voice, consent, and accountability in environmental discourse. By framing nature as a violated subject rather than a passive resource, the analysis challenges dominant narratives of development and progress, advocating for reparative justice and ethical stewardship. The work ultimately calls for a shift from anthropocentric exploitation to relational care, in which ecological testimony is not only heard but also acted upon through sustainable practices.

Keywords: #MeToo Movement; Nature's #MeToo; Ecological Abuse; Environmental Reckonings; Power; Voice; Resistance; Sustainable Practices

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Introduction

This study stems from the recently concluded Royal Geographical Society (with the Institute of British Geographers) conference in August 2025, where I convened two sessions sponsored by the Gender and Feminist Geographies Research Group (GFGRG)¹— 1. #372: Ecofeminism and Environment (1) and 2. #480: Ecofeminism and Environment (2). In a span of three hours, there were 14 presentations altogether. Chaired by Professor Tulshi Kumar Das, Ecofeminism and Environment (1) had the following seven presentations:

#1790 Gendered Vulnerability and Adaptative Response to Climatic Variability and Extreme Events by Dr Srabani Sanyal

#1788 Eco-Feminism in Bihu: Celebrating Femininity, Fertility, and Resistance through Sound and Dance by Dr Palme Borthakur and Dr Utpola Borah

#1816 Nature-Based Solution for Sustainable Urban Development- an Ecofeminist approach by Praschaya Kaushik, Sanjeeb Kakoty and Vishakha Bansal

#1817 Ecofeminism and gendered violence in Bangladesh by Dr Tulshi Kumar Das

#1830 Goddess Ganga's Embrace: Women's Role in the Save Ganga Movement and Namami Gange Project in Banaras by Dr Anuradha Singh

#1833 Ecofeminism and Climate Resilience: Women's Role in Sustainability and Heritage Preservation in Majuli Island, Assam, India by Jyotisma Bordoloi and Dr Madhushree Das

#1913 Nexus between women and environment: References of Eco-activism from India by Dr Suman Singh

The second session, Ecofeminism and Environment (2), comprising seven presentations, was chaired by Professor Srabani Sanyal, which is as follows:

#2612 Comprehending Urban Gardening as the Catalyst Empowering Women, Community Engagement and Environmental Awareness: An Ecofeminist Approach by Anwesha Mahanta and Dr Parijat Borgohain

#2614 Hargila Army: Revisiting Environmental Concerns through Gender Lens by Dr Barnali Sarma, Deepsikha Barman and Papari Mala Bhuyan

#2615 Probing the Role of Rural Women of Assam as Agents of Ecological Sustainability by Dr Polly Vauqueline

#2616 Beyond Myth: Son of the Thundercloud as an Ecofeminist Text by Dr Debajyoti Biswas and Ms Jayashree Haloi

#2617 Women and Wilderness: Assamese Women as Protectors of Biodiversity by Dr Pranjit Kumar Sarma

#2618 Medha Patkar and Frontline Women in Environmental Activism by Dr Venkat Rao Pulla and Dr Rituparna Bhattacharyya

#2619 Climate Change and Gendered Vulnerability: Analysing the Impact on Rural Women in India by Dr Seema Tiwari and M Caroline

Most of these presentations unveiled the toxic truths and environmental injustices arising from environmental harm and related issues, including the politics embedded in them. Upon critical reflection of these presentations, the environment appears to be a 'violated subject' rather than a passive natural resource, where violence against nature and natural resources continues in the intersection of gendered dynamics (class, race, sexuality, caste and others). Do we hear the echoes of Nature's

¹ Gender and Feminist Geographies Research Group (GFGRG). <https://gfgrg.co.uk/>

MeToo in their everyday environmental struggles? Can we reimagine ecological degradation as a form of systemic abuse, and how societal structures are shaped by ecological masculinities, contributing to an understanding of the Anthropocene (Bhattacharyya, 2026; Ekowati et al., 2023; Pulé & Hultman, 2021; Twine, 2021)? This study is an attempt to be a green silence breaker by aiming to foreground Nature's #MeToo, where muted landscapes, ravaged ecosystems, and oppressed communities testify to the scars of extractive violence.

Nevertheless, it remains well documented that an African American civil rights activist, Tarana Burke, coined the phrase #MeToo movement in 2006 to support survivors of sexual assault in reclaiming their self-confidence and sense of identity (Bhattacharyya, 2018; 2024; 2025a; De Maio, 2023). However, in October 2017, Alyssa Milano, an American actress cum activist, hijacked the phrase by taking it to social media, where her tweet catalysed a global reckoning (Bhattacharyya, 2018; 2024; De Maio, 2023); it erupted across digital platforms, creating an epidemiologic moment, exposing the pervasiveness of sexual violence and empowering the survivors to speak out. Indeed, this epidemiologic moment, exposing the ubiquity of sexual violence against gender, redefined feminist discourse, challenging patriarchal structures and foregrounding the politics of voice, consent, and accountability. Although the #MeToo movement has faced backlash and can be considered simply rhetoric, the scale of sexual assaults against gender refuses to die and continues in various forms and scales across the globe; yet, amid this human-centred upheaval, a critical question arises in the environment: the suffering of wounded landscapes, plundered ecologies, and sidelined communities, which reveals the brutal legacy of violence wrought by extraction contributing to climate crises/change. In the following section, I discuss the toxic truths concerning environmental harm and the politics of disclosure.

Before proceeding, it is necessary to set out the conceptual and methodological scaffolding on which this commentary rests. Theoretically, Nature's #MeToo is advanced here not as a decorative metaphor but as an analytical grammar. Reading across the testimonial literature on gendered violence, four recurring elements can be isolated: an asymmetrical relation of power; the extraction of value from a body construed as available rather than consenting; the systematic discrediting of those who testify; and an organised architecture of denial. The wager of this study is that these four elements describe ecological harm with equal precision, and that naming them as such shifts nature from the category of resource to the category of violated subject—with the attendant claims to voice, consent, and redress that such a shift entails. Methodologically, this is a commentary rather than an empirical study, and it makes no claim to primary data. It proceeds through interpretive synthesis, reading three bodies of material against one another: the fourteen conference papers that prompted it; documented cases of environmental harm and defender killings drawn from peer-reviewed epidemiological, legal, and social-scientific scholarship and from established monitoring organisations; and the ecofeminist, Indigenous, and rights-of-nature literature through which such cases may be interpreted. Cases are selected illustratively rather than exhaustively for their capacity to demonstrate the grammar at work across contrasting geographies of the Global North and the Global South, and the analysis is therefore offered as a provocation towards further empirical enquiry rather than as a generalisable finding.

The commentary unfolds accordingly. The section that follows, 'Socio-Economic Development and the Warming Globe', situates the argument historically: it traces the intellectual lineage through which geography has explained the human–environment relation: environmental determinism, environmental possibilism, and ecofeminism and sets this against the long scientific record of anthropogenic warming from Fourier to the Keeling Curve, arguing that the first two

traditions cannot account for the question of who is harmed and by whom, whereas the third can. The third section, 'Whispers in the Wilderness', applies the four-part grammar to contemporary testimonies of poisoned waters, dismembered forests, murdered defenders, and organised denial. The fourth, 'Breaking the Green Silence', turns from harm to the silence-breakers, tracing ecofeminist and Indigenous testimonies of resistance and their institutional echo in rights-of-nature jurisprudence. The fifth, 'From Testimony to Repair', asks what follows once testimony is believed, drawing three lessons on reparative and just transition from the ozone precedent, nature-based carbon removal, and gender-transformative transition frameworks. The conclusion returns to the opening provocation.

Socio-Economic Development and the Warming Globe

The 30th United Nations Climate Change Conference (COP30), held in Belém, Pará—deep within Brazil's Amazon region—from 10 to 21 November 2025, centred on accelerating climate action, advancing the phase-out of fossil fuels, and addressing persistent tensions over climate finance and trade. More than 80 countries (out of over 195 that participated) advocated for a clear roadmap to eliminate fossil fuel use, building on the commitments made at COP28 (Dubai, United Arab Emirates, from 30 Nov–12 Dec 2023) to reduce ecological abuse, cap global temperature rise at 1.5°C, support vulnerable communities in adapting to climate impacts, and reach net-zero emissions by 2050. However, this push faced resistance from countries such as Saudi Arabia, despite recognising that oil and gas are widely considered major drivers of climate change, which is intensified by the significant release of heat-trapping greenhouse gases like carbon dioxide when burned for energy. It is essential to acknowledge that the Industrial Revolution was made possible mainly through the transformative power of fossil fuels (UNDP, 2022; see also Bhattacharyya, 2025b). The United States' absence from COP 30 raised concerns about global leadership and accountability. At the same time, major

developing nations like India and China called for the full enforcement of Article 9.1 of the Paris Agreement (2015), which mandates that developed countries provide—not merely mobilise—financial resources. Nevertheless, the advocacies of the 80 countries at COP 29 (held in Baku, Azerbaijan, from 11 to 22 November 2024) appear to be in paradox with the speech made by Azerbaijan's President Ilham Aliyev, who described natural resources—including oil and gas—as a "gift of God" (Rannard & Davies, 2024). His address included the following remarks:

Oil, gas, wind, sun, gold, silver, copper, all... are natural resources, and countries should not be blamed for having them, and should not be blamed for bringing these resources to the market, because the market needs them (Rannard & Davies, 2024).

The speech delivered by Azerbaijan's President arguably lays bare a sobering truth: that many nations across the globe still fail to treat the mounting evidence of environmental degradation and climate crises with the seriousness they demand—likely due to a complex web of factors including commercial interests, economic growth, and the vast workforce tied to fossil fuel industries. Here I am reminded of three schools of thought, which we learned as an undergraduate geography student in the early 1990s—Environmental determinism (Alsan, 2015; Diamond, 1997; Huntington, 1915; Semple, 1911), Environmental possibilism (de la Blache, 1926; Glacken, 1967) and later the concept of ecofeminism (d'Eaubonne, 1974; Diamond & Orenstein, 1990; Griffin, 1978; Jensi Helan & Borah, 2024; Merchant, 1980; Mies & Shiva, 1993; Plumwood, 1993; Plant, 1989; Shiva, 1988; Warren, 2000). Environmental determinism, often referred to as climatic or geographical determinism, gained prominence in the 19th and 20th centuries through the works of geographers such as Ellen Churchill Semple and Ellsworth Huntington. They argued that climate and geography are the primary forces shaping human behaviour and societal development, suggesting that environmental conditions can predetermine social progress,

economic success, and even cultural traits. Friedrich Ratzel, regarded as the founder of political geography, initially explored the role of the environment in influencing the state, though his later writings leaned more toward social Darwinism. Semple, a student of Ratzel, became one of the most vocal proponents of environmental determinism, asserting in her influential works that the environment fundamentally moulds human character and culture. Huntington further advanced the theory through his studies on climate's impact on civilisation, linking variations in temperature and humidity to human energy levels and productivity. A classic illustration of this perspective is the fertile Nile River valley, which facilitated agriculture and supported the rise of Egyptian civilisation. Similarly, the ancient Greek historian Herodotus maintained that Egypt's prosperity was determined by its geography (Alsan, 2015; Diamond, 1997; Huntington, 1915; Semple, 1911). The Roman historian Tacitus attributed the perceived virtue of the Germans to their harsh, cold climate, contrasting it with the supposed decadence of Italians living in warmer conditions. Centuries later, German geographer Carl Troll argued that the Inca Empire's expansion was constrained by the distribution of llamas—the only available pack animals in the Andes. More recently, Harvard scholar Marcella Alsan contended that the widespread presence of the tsetse fly in Sub-Saharan Africa impeded development by transmitting sleeping sickness. This disease debilitated both humans and cattle (Alsan, 2015). Although environmental determinism has been criticised for its oversimplification and associations with colonialist and racist ideologies, scholars such as Jared Diamond, Jeffrey Herbst, and other social scientists reignited interest in the framework during the late 20th and early 21st centuries. This revival, often termed neo-environmental determinism, explores how geographic and ecological factors shape state-building, economic development, and institutional structures (Diamond, 1997; Herbst, 2000; Sluyter, 2003).

The concept of environmental possibilism, introduced by French geographer Paul Vidal de

la Blache in the early 20th century, emphasises that while the environment imposes certain limits, it is culture, technology, and human decision-making that ultimately shape societal development. This perspective rejects the deterministic notion that climate or geography alone dictates human destiny. Emerging as a direct response to environmental determinism, possibilism asserts that although the physical environment presents both constraints and opportunities, human beings possess the agency, creativity, and technological capacity to adapt and transform their surroundings (de la Blache, 1926; Glacken, 1967).

Several examples illustrate this philosophy. Dutch land reclamation demonstrates how human ingenuity can overcome environmental challenges: despite inhabiting a low-lying, flood-prone region, the Dutch constructed dikes, canals, and polders to reclaim land from the sea. Similarly, Israel's adoption of drip irrigation technology enabled agriculture in arid zones, showcasing adaptation rather than limitation. Singapore, despite its restricted land area and scarce resources, rose to become a global economic hub through strategic planning, trade, and technological innovation. Indigenous communities worldwide also embody this principle, adapting mountainous terrains by building terraces that support sustainable agriculture. Further, technological innovation (high-yield seeds, irrigation, fertilisers) enabled India to overcome climatic and soil constraints and achieve food security via its Green Revolution in the 1960s.

Determinism and possibilism, for all their disagreement, share a common silence. Both pose the human–environment relation as a question of capacity: the first asks what the environment does to human societies, the second what human societies may do in spite of it. Neither asks the prior question—who, within those societies, does the harming, and who bears the cost. In both traditions, 'humanity' appears as an undifferentiated actor, 'nature' as an undifferentiated backdrop, and power itself goes unnamed: Dutch dikes and Israeli drip irrigation are narrated as triumphs of collective

ingenuity without asking whose labour built them, whose land was reclaimed, or whose water was diverted. It is precisely this silence that the third tradition breaks. Ecofeminism refuses both the fatalism of determinism and the untroubled optimism of possibilism by making power, rather than nature, the explanatory variable, and by insisting that the domination of nature and the domination of women are not two separate histories but one. This shift from capacity to power is what makes ecofeminism the indispensable bridge between the climate record rehearsed in this section and the testimonial grammar developed in the remainder of this commentary; it is also what makes it possible to speak of the abuse of nature at all.

Ecofeminism, coined by French feminist Françoise d'Eaubonne in 1974, is a branch of feminism that examines the interconnections between the oppression of women and the degradation of nature, both of which are rooted in patriarchal systems of domination. More broadly, ecofeminism critiques how gender, race, and class intersect with ecological exploitation. It integrates feminist principles of equality with ecological concerns, emphasising care, collaboration, and respect for all forms of life. Central to this perspective is the recognition that women and nature have historically been marginalised, exploited, and treated as property under patriarchal structures. In response, ecofeminism challenges hierarchical systems that privilege control and exploitation over nurturing and sustainability, advocating instead for holistic and egalitarian societies that value interdependence, intuition, and ecological balance (d'Eaubonne, 1974; Diamond & Orenstein, 1990; Griffin, 1978; Jensi Helan & Borah, 2024; Merchant, 1980; Mies & Shiva, 1993; Plumwood, 1993; Plant, 1989; Shiva, 1988; Warren, 2000).

Several examples illustrate eco-feminism in practice. The *Chipko* Movement in India, led by rural women in Uttarakhand, involved tree-hugging protests to prevent deforestation, underscoring their dependence on forests for survival and their role as ecological stewards

(Singh, 2014; Sharma, 2013). In Kenya, the Green Belt Movement, founded in 1977 by Wangari Maathai, mobilised women to plant trees, combat desertification, empower communities, and link environmental care with women's rights (Maathai, 2004). Rachel Carson's *Silent Spring* (1962) exposed the dangers of pesticides and inspired ecofeminist critiques of industrial exploitation of nature. Literary contributions also reinforce ecofeminist thought: Susan Griffin's *Woman and Nature* (1978) and other works weave narratives connecting women's experiences with ecological resistance (Griffin, 1978; Jensi Helan & Borah, 2024). Vandana Shiva's activism further exemplifies ecofeminism by linking seed sovereignty, sustainable agriculture, and women's empowerment, arguing that ecological destruction and gender oppression are deeply intertwined (Shiva, 1988).

While these three schools of thought hold water from their own standpoint, I contend that these are largely hegemonic, rooted in Anglo-American and Eurocentric perspectives, and fail to adequately address the challenges of rising global temperatures, greenhouse gas emissions, and broader environmental degradation, as well as environmental justice discourse—ecofeminism being the notable exception. Even ecofeminism, however, has been charged with universalising the experience of women in the Global North and with essentialising the woman–nature bond; the strand on which I draw here is the materialist and postcolonial one, in which that connection is historical and political rather than natural (Mies & Shiva, 1993; Plumwood, 1993; Shiva, 1988). It is from this strand that the present argument proceeds: if the domination of nature is structured like the domination of gendered bodies, then the harm it produces should leave testimony behind. It is to those testimonies that the discussion now turns.

Nonetheless, it is crucial to recognise that large-scale environmental degradation may have originated with the invention of the atmospheric steam engine by Thomas Newcomen in 1712 (Britannica Editors, 2025). As the first practical device for pumping water from mines, it marked

a significant leap in engineering. It paved the way for the industrial-scale use of coal, setting in motion the gradual onset of the Industrial Revolution and contributing to the rise in global temperatures. In the 1820s, French polymath Joseph Fourier—renowned for his contributions to physics and mathematics—introduced the concept of Earth’s energy balance using the analogy of a greenhouse. He anticipated the atmospheric effect in which infrared radiation emitted by the Earth’s surface is absorbed by the atmosphere and then re-emitted downward, thereby warming the planet (Fourier, 1824; 1827). American scientist Eunice Newton Foote further explored the Greenhouse Gas Effect through pioneering experiments in 1856, in which she measured temperature variations in cylinders filled with different gases. Her findings demonstrated that a mixture of water vapour and carbonic acid gas (now known as carbon dioxide) could significantly increase temperature (Birmingham Museums, n.d.; Ortiz & Jackson, 2022). Although she did not identify the specific role of infrared radiation, her groundbreaking insights were largely overlooked by the scientific community of her time, perhaps because of the rigidly entrenched academic patriarchal structure.

Through his pioneering experiments, the Irish physicist John Tyndall (2 August 1820 – 4 December 1893) laid the foundation for the modern understanding of the greenhouse effect. He demonstrated that water vapour and various gases could trap heat by absorbing infrared radiation (Tyndall, 1860). He meticulously quantified his findings, distinguished the effects of different infrared emitters, and in 1861 published his landmark paper, *The Bakerian Lecture: On the Absorption and Radiation of Heat by Gases and Vapours, and on the Physical Connexion of Radiation, Absorption, and Conduction* (Tyndall, 1861). In this work, he explained how water vapour acts as a greenhouse gas, thereby laying the foundation for climate science.

Svante Arrhenius (1859–1927), Sweden’s first Nobel laureate, pioneered climate modelling by showing that rising CO₂ from coal burning could

intensify the greenhouse effect, potentially warming Earth by several degrees (Arrhenius, 1897). Around the same time, American geologist Thomas Chrowder Chamberlin (1843–1928) warned that the combustion of fossil fuels could drive global warming (Fleming, 2000; Philander, 2008). Nevertheless, despite their foresight, both underestimated that the process had already begun. In 1900, the Swedish physicist Knut Johan Ångström (12 January 1857 – 4 March 1910) demonstrated that even trace amounts of atmospheric CO₂ absorb portions of the infrared spectrum (Ångström, 1900). Although he did not grasp the full implications of this finding, his work marked a pivotal step in advancing the theory of the greenhouse effect, laying the groundwork for understanding how CO₂ intensifies global warming.

Petroleum and its derivatives began to be exploited on a massive scale, particularly with the rise of major oil fields in Texas, the Persian Gulf, and beyond. By 1927, the combustion of fossil fuels and industrial emissions had already driven annual CO₂ output to approximately one billion tonnes (Jones et al., 2023; see Ritchie et al., 2020).

Between 1938 and 1940, Guy Stewart Callendar (9 February 1898 – 3 October 1964), a British steam engineer and inventor, analysed weather records from 147 stations worldwide. He demonstrated that global temperatures had risen over the past century in tandem with rising atmospheric carbon dioxide concentrations (Callendar, 1938), a relationship later termed the “Callendar Effect” (Fleming, n.d.). Although meteorologists widely dismissed his findings at the time, the data showed that Earth’s average surface air temperature had already increased by approximately 0.25 °C.

From 1940 through 1970, global temperatures began to decline, dropping by about 0.2 °C. Some scientists even speculated that the Earth was entering a “new ice age.” The cooling was likely linked to rising levels of aerosol pollutants generated during the postwar industrial boom—particularly following the Second World War (1939–1945)—which scattered and deflected sunlight away from the planet. This

phenomenon of sunlight-blocking pollution quickly captured public attention, and in 1974, *Time* magazine published a widely discussed article titled "Another Ice Age?" (Time, 1953; 1974).

Amid concerns about a possible new ice age, Gilbert Norman Plass (22 March 1920 – 1 March 2004), a Canadian physicist, employed emerging technologies—including early computers—to conduct a detailed study of how different gases absorb infrared radiation. His analysis, reported in *Time* magazine, concluded that “[a]t its present rate of increase, the CO₂ in the atmosphere will raise the earth’s average temperature 1.5° Fahrenheit every 100 years. ... for centuries to come, if [hu]man’s industrial growth continues, the earth’s climate will continue to grow warmer” (Time, 1953; 1974). Decades later, his pioneering work inspired the 2018 short film *Invisible Blanket*.

Earlier, in 1958, atop the Mauna Loa Observatory in Hawaii—an island state of the United States located about 2,000 miles (3,200 km) southwest of the mainland—the Scripps Institution of Oceanography established a monitoring station where Charles David Keeling (20 April 1928 – 20 June 2005) began systematically measuring atmospheric carbon dioxide. His work reinforced the climate model first proposed by Swedish Nobel Laureate Svante Arrhenius, highlighting the potential for human activity to drive the greenhouse effect and global warming.

The data revealed a distinctive sawtooth-shaped curve, marked by seasonal fluctuations caused by the annual cycle of vegetation growth and decay in the Northern Hemisphere, yet showing a steady upward trend. This record became known as the Keeling Curve. In 1960, CO₂ concentrations measured approximately 315 parts per million (ppm); by 1980, they had risen to 337 ppm, reaching 367 ppm in 2000 and surpassing 400 ppm in 2013. The upward trajectory continued, with levels recorded at 412 ppm in 2019, 418.82 ppm in October 2023, and 422.38 ppm in October 2024. The latest CO₂ concentration reading (as of 08 July 2026) is

429.79 ppm (Scripps Institution of Oceanography, n.d.).

Arguably, climate change and sustainability may be likened to ‘stepsisters’—closely linked yet often treated as separate concerns. Achieving a clean environment alongside sustainable development remains a formidable challenge, demanding substantial financial investment (Bhattacharyya, 2019; 2025b). The idea of sustainable development gained global traction with the 1987 publication of the World Commission on Environment and Development’s report, *Our Common Future*, widely known as the Brundtland Report, named after Gro Harlem Brundtland. The report states:

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth. The Commission believes that widespread poverty is no longer inevitable. Poverty is not only an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes (World Commission on Environment and Development (WCED), 1987).

Nearly four decades after the Brundtland Report, however, the gulf between the rhetoric of sustainability and the reality of extraction continues to widen. It is precisely within this gulf that the whispers of Nature’s #MeToo can be

heard—if only we choose to listen. The following section, therefore, turns to these whispers: the testimonies of ecological abuse that mirror, with unsettling fidelity, the grammar of gendered violence that the #MeToo movement laid bare.

Whispers in the Wilderness: Ecological Abuse vis-à-vis Climate Change Crises

If the #MeToo movement taught the world anything, it is that abuse follows a recognisable grammar: the exploitation of an unequal power relationship; the extraction of value from a body rendered voiceless; the silencing, discrediting, or elimination of witnesses; and, finally, the denial and gaslighting that shield perpetrators from accountability (Bhattacharyya, 2018; 2024). I contend that ecological abuse is scripted in precisely the same grammar. The testimonies are everywhere—etched into lead-poisoned water pipes, clear-felled hillsides, and the lungs of humans breathing toxic air—yet, like survivors' testimonies before 2017, they are routinely dismissed as anecdotal, exaggerated, or inconvenient.

Consider, first, the testimonies of poisoned waters. In Flint, Michigan (USA), the 2014 switch of the city's water supply to the untreated Flint River exposed a predominantly African American population of roughly 100,000 residents to lead-contaminated drinking water, with children's blood lead levels rising significantly in the most affected neighbourhoods (Hanna-Attisha et al., 2016). Flint was not an aberration, but a symptom of what Bullard (1990) famously theorised as environmental racism—the systematic siting of environmental hazards in communities of colour with the least political power to resist. The same pattern is legible along 'Cancer Alley' in Louisiana, where a corridor of more than 200 petrochemical plants along the Mississippi River corresponds with elevated cancer rates among predominantly Black communities (Bullard, 1990). It is equally legible in the long-term boil-water advisories endured by remote Indigenous communities in Canada, where the absence of safe drinking water testifies to systemic neglect and enduring colonial legacies. In each case, the abused body—human and hydrological alike—was

treated as expendable, and its testimony was disbelieved until the evidence became undeniable.

Consider, next, the testimonies of dismembered forests and trafficked creatures. Illegal and quasi-legal logging across the Amazon and Indonesia—driven by timber, soy, cattle, and palm oil frontiers—continues to dispossess Indigenous communities, erode biodiversity, and release vast stores of carbon, often facilitated by corporate interests and weak enforcement. Hazardous waste from industrialised nations is still dumped, in violation of international environmental law, in Sub-Saharan African countries such as Nigeria, contaminating soils and water on which agrarian livelihoods depend. Wildlife trafficking—ranked among the most profitable illegal trades globally—strips forests and savannahs of elephants, pangolins, and countless other species to feed distant markets. And in the megacities of the Global South, most visibly Delhi, hazardous air quality produced by vehicular emissions, industrial activity, and crop burning disproportionately sickens low-income populations with the least access to healthcare, making cities simultaneously the perpetrators and the frontline casualties of the climate and health emergency (Nieuwenhuijsen, 2023; 2024). Indeed, more than 3.8 million people—mostly women and children—die annually from indoor air pollution linked to unclean cooking, lighting, and heating systems (UNRISD, 2025). These are not isolated 'incidents'; they are serial abuses, perpetrated with impunity against victims whose consent was never sought.

Importantly, yet invisible, the deepening entanglement of digital technologies with daily life has amplified our environmental footprint. Every email dispatched, every photograph stored, every video streamed, every AI prompt generated, and every file entrusted to the cloud ultimately rests upon vast physical infrastructures. Beneath the illusion of a weightless, frictionless internet lies an immense industrial substratum: expansive data centres filled with power-intensive servers that exhale staggering volumes of heat (AI AM DEATH, n.d.; The AIMeters, n.d.; Turkay et al., 2026). It is

evident that the total global carbon footprint from digital technologies and AI is estimated at 200–250 million kilograms of CO₂ per day, a scale comparable to the daily emissions of 40–50 million petrol cars or the carbon released by burning approximately 700,000 barrels of oil.

Sustaining this machinery demands prodigious quantities of electricity and, in many facilities, substantial volumes of water for cooling. Consequently, the digital ecosystem's accelerating resource appetite places mounting pressure on local water reserves, energy grids, and the fragile ecologies that surround them (AI AM DEATH, n.d.; The AIMeters, n.d.; Turkay et al., 2026).

What renders the #MeToo analogy chillingly literal, however, is the fate of those who dare to speak for the abused Earth. Global Witness documentation, as reported by Fleck (2025a), records that at least 146 environmental defenders were killed or disappeared in 2024 alone in connection with their activism—figures that are likely underestimates owing to underreporting, journalists being targeted, and families refraining from seeking justice for fear of retaliation. Colombia was the deadliest country with 48 cases, followed by Guatemala (20), Mexico (19), Brazil (12), and the Philippines (8); strikingly, 33 per cent of those killed or disappeared were Indigenous Peoples, despite Indigenous communities constituting a small fraction of the global population (Fleck, 2025a). Since Global Witness began documenting these killings in 2012, at least 2,253 defenders have been killed or disappeared, with Latin America recording the most murders and mining and extractives constituting the most dangerous industry, followed by logging and agribusiness; nearly a third of the 2024 cases were linked to organised crime, while state actors—armed forces, police, and other government entities—were connected to the killings of 17 defenders (Fleck, 2025a). If the silencing of survivors is the

signature of abusive power, then the assassination of Berta Cáceres² like figures across the Global South is nothing less than the murder of Nature's witnesses on the stand (Amnesty International, 2016; Goldman Environmental Prize, 2015).

The final act in the grammar of abuse is denial, and here, too, the parallels are stark. Just as survivors of sexual violence have historically been met with disbelief and character assassination, the planet's testimony is met with an industrial-scale apparatus of misinformation. In the run-up to COP30, the Climate Action Against Disinformation coalition and the Observatory for Information Integrity documented a 267 per cent surge in COP-related disinformation between July and September 2025 (Fleck, 2025b). A Reuters survey found that 43 per cent of respondents in India, 29 per cent in Pakistan, and 27 per cent in Brazil reported encountering false or misleading information about climate change within a single week, an eight-country average of 25 per cent (Fleck, 2025b). Such disinformation does not merely muddy public debate; it corrodes the very possibility of collective action, leading policymakers to believe that only 38 per cent of people would contribute a share of their income to fight climate change when, in reality, 69 per cent report being willing to do so (Fleck, 2025b). It was in this context that Brazilian President Luiz Inácio Lula da Silva declared COP30 the 'COP of truth', and twelve nations signed the first-ever Declaration on Information Integrity on Climate Change, pledging to defend environmental journalists, scientists, and researchers who commit their lives to dispelling false narratives (Fleck, 2025b). That such a declaration was deemed necessary at all is itself a testimony: the gaslighting of the planet has become so pervasive that truth-telling now requires diplomatic protection.

² Berta Cáceres (1971–2016) was a Honduran Lenca environmental defender, a prominent Indigenous rights advocate, and a co-founder of COPINH, the Council of Popular and Indigenous Organisations of Honduras. She gained international prominence for her steadfast

protection of the Gualcarque River and her opposition to the Agua Zarca hydroelectric project, a campaign that ultimately cost her life (Amnesty International, 2016; Goldman Environmental Prize, 2015).

Read together, these threads the poisoning of racialised and Indigenous communities, the plunder of forests and species, the assassination of defenders, and the orchestrated discrediting of climate science constitute the corpus of Nature's #MeToo testimonies (Bhattacharyya, 2026). They reveal ecological abuse not as a series of regrettable externalities but as a structural relation of domination, one in which the intersecting hierarchies of gender, race, class, caste, and coloniality determine whose environments are sacrificed and whose voices are believed (Bullard, 1990; Ekowati et al., 2023; UNRISD, 2025). The question that follows is whether and how this silence is being broken.

Breaking the Green Silence: Ecofeminist and Indigenous Testimonies of Resistance

Silence breakers rarely emerge from the centres of power; they emerge from their margins. It is therefore unsurprising that the most sustained testimonies against ecological abuse have come from women—particularly rural, Indigenous, working-class, and racialised women—whose bodies and livelihoods absorb the first blows of environmental violence. Ecofeminist praxis across the world may thus be read as a decades-long anticipation of Nature's #MeToo: a refusal to let the abuse of land, water, and forest pass unnamed.

The genealogy of such green silence-breaking is long and geographically dispersed. In the Uttarakhand Himalaya, the women of the Chipko movement physically embraced trees in the 1970s to prevent commercial felling, deploying satyagraha—nonviolent resistance—to assert that 'ecology is permanent economy'; their activism catalysed a fifteen-year ban on green felling in the region and shaped India's Forest (Conservation) Act, 1980 (Government of India, 1980; Sharma, 2013; Singh, 2014).³ In Kenya, Wangari Maathai's Green Belt Movement, founded in 1977, mobilised rural women to plant tens of millions of trees, becoming 'foresters

without diplomas' who fused environmental restoration with women's economic empowerment, democratic struggle, and legal advocacy—halting, among other projects, the construction of a skyscraper in Nairobi's Uhuru Park (Maathai, 2004). In the United States, Lois Gibbs and the working-class mothers of Love Canal exposed the health catastrophe of toxic dumping and forced regulatory change, while Mohawk midwife Katsi Cook's Akwesasne Mother's Milk Project revealed the disproportionate chemical contamination of Indigenous children's first food—breast milk—thereby rendering the most intimate of testimonies scientifically legible (Merchant, 1980; Plant, 1989). In the Niger Delta, women's nonviolent protests against oil exploitation named the entanglement of gender, ecology, and corporate power; in the United Kingdom, initiatives such as the Women's Environmental Network's Soil Sisters programme link therapeutic gardening with the healing of women survivors of domestic violence—an extraordinary literalisation of the connection between gendered abuse and ecological repair; and from Harlem to Detroit, women-led urban greening collectives have transformed vacant lots into community gardens of food security and neighbourhood renewal (Diamond & Orenstein, 1990; Warren, 2000). Vandana Shiva's Navdanya movement, meanwhile, insists that seed sovereignty and women's knowledge are inseparable from ecological survival (Shiva, 1988). What unites these geographically disparate practices is their epistemological stance: they treat the degraded environment not as a broken machine but as violated kin whose testimony demands response.

Indigenous epistemologies deepen this stance immeasurably. As the contributors to *Environmental Humanities in India* demonstrate, communities such as the Khasi of Meghalaya steward sacred groves and communal lands through religious and customary institutions; the

³ India's Forest (Conservation) Act, 1980 is one of the country's most important environmental laws, enacted to regulate the diversion of forest land for non-forest purposes and to curb deforestation. It created a centralised approval system, ensuring that state

governments cannot unilaterally de-reserve forests or permit their use for industry, mining, or infrastructure without the consent of the Central Government (Government of India, 1980).

Bodo and Garo peoples of North East India articulate 'human–nature' convergences through the Bathou faith and the Wangala harvest festival; and Adivasi lifeworlds across the subcontinent encode ecological reciprocity in myth, ritual, and story (Biswas & Ryan, 2025). Within such cosmologies, rivers, hills, and forests are not mute resources awaiting valuation but animate relations—ancestors, mothers, deities—whose violation is registered as a moral and spiritual injury, not merely an economic externality. In other words, Indigenous epistemologies have always possessed what Western environmental law is only now inventing: a framework in which nature can be wronged.

Environmental law's belated recognition of this fact constitutes perhaps the most consequential institutional echo of Nature's #MeToo. In 2017, Aotearoa New Zealand's Te Awa Tupua Act conferred legal personhood upon the Whanganui River, acknowledging the Māori understanding of the river as a living ancestor; in the same year, the Uttarakhand High Court in India declared the Ganga and Yamuna rivers to be living legal entities with rights, duties, and liabilities (O'Donnell & Talbot-Jones, 2018). Whatever the practical limitations of these judgments—the Indian ruling was subsequently stayed—their symbolic significance is profound: for the first time, the violated subject has been granted standing to testify in court. The rights-of-nature jurisprudence, in effect, translates the ecofeminist and Indigenous insistence on nature's subjecthood into the language of consent and accountability that the #MeToo movement made globally intelligible. A river with legal personality is a river whose 'no' can, at least in principle, be heard.

From Testimony to Repair: Just Transition and Reparative Pathways

Testimony, however, is not an end in itself. The #MeToo movement's deepest demand was never merely that survivors be heard, but that structures be transformed so that abuse cannot recur—and that harm already done be repaired. The same must hold for Nature's #MeToo. What, then, might reparative justice for the abused Earth look like?

The first lesson is that repair is possible (Stern, 2025). The near-disappearance of ozone-depleting gases offers the most compelling precedent: following the Montreal Protocol (United Nations Environment Programme, 1987),⁴ the global consumption of chlorofluorocarbons and halons—once ubiquitous in aerosols, refrigerants, and fire extinguishers—has been all but phased out, with the remaining hydrochlorofluorocarbons scheduled for complete phase-out by 2030, and scientific assessments now project that the ozone layer will be restored to its 1980 condition by 2066 at the latest (Buchholz, 2023). The ozone story demonstrates that when testimony is believed and acted upon collectively, even planetary-scale abuse can be halted and healed.

The second lesson is that the most effective forms of ecological repair are also the most relational. Data on carbon dioxide removal reveal that nature-based solutions—forest management and reforestation or afforestation—remain by far the most cost-effective methods, with weighted average prices of merely US\$12–16 per tonne of CO₂ captured in 2023, compared with US\$715 for direct air capture and US\$1,402 for direct ocean capture and storage (Gaudiaut, 2025). Global carbon capture capacity has tripled over the past decade—from 19 million tonnes annually in 2011 to 52 million tonnes in 2023, with forecasts

⁴ The Montreal Protocol is the landmark 1987 international treaty designed to protect the stratospheric ozone layer by phasing out ozone-depleting substances (ODS). It remains one of the most successful environmental agreements ever adopted, achieving universal ratification and driving the global phase-out of nearly 100 harmful chemicals such as CFCs and halons. The

Montreal Protocol is widely regarded as the most effective environmental treaty in history, credited with enabling the gradual recovery of the ozone layer and preventing millions of cases of skin cancer, cataracts, and ecological harm. Its success is often cited as a model for global climate cooperation (United Nations Environment Programme, 1987).

of 1.2 billion tonnes by 2035—yet this still represents a small fraction of anthropogenic emissions (Gaudiaut, 2025). The implication is twofold. On the one hand, the humble, women-led work of planting and protecting trees—the work of Chipko and the Green Belt Movement—turns out to be not merely symbolically resonant but economically and technically superior to the high-technology fantasies of engineered removal. On the other hand, no volume of carbon removal can substitute for ending the abuse at its source: restoration must never become the perpetrator's licence to reoffend.

The third lesson concerns justice in transition itself. The concept of 'just transition' originated in the North American labour movement of the 1970s–1990s, as unions—most notably through the advocacy of Brian Kohler—insisted that workers should not bear the costs of necessary environmental change (Kohler, 1998; Rosemberg, 2010; Smith, 2017; see, Bhattacharyya et al., 2023). The concept has since travelled into the preamble of the Paris Agreement and the lending frameworks of international financial institutions (Just Transition, n.d.; Smith, 2017; Stern, 2025) and is increasingly embedded in national legal frameworks (UNDP, 2025). Yet, as UNRISD (2025) powerfully argues, mainstream just transition approaches still overlook at least one critical dimension: gender. Transition policies risk worsening structural gender inequality if gender issues are not prioritised, since women are overrepresented in informal and caring sectors, frequently lack land tenure, and are disproportionately vulnerable to dispossession by large-scale environmental projects (UNRISD, 2025). A gender-transformative just transition, by contrast, is already being prefigured from the Global South: the Self-Employed Women's Association's Green Livelihood Campaign in India has established the country's first women-owned solar park at Naradi village—generating 2.7 MW of electricity, providing consistent income for 300 women shareholders, and reducing time spent collecting fuel by 70 per cent; the Child-Centred Climate Change Adaptation programme in Fiji institutionalised women's and children's decision-making

authority in village governance while combining traditional ecological knowledge with scientific projections; COSATU in South Africa has developed a toolkit embedding gender equity within collective bargaining for the coal transition; and the La Mojana project in Colombia demonstrates how ecosystem restoration and water management can simultaneously reduce women's care burdens (UNRISD, 2025). These initiatives embody precisely the survivor-centred logic that reparative justice demands recognition of harm, redistribution of resources and power, and representation of the historically silenced in the decisions that shape their futures (Stern, 2025).

Conclusion: Hearing Nature's Testimony

This commentary began with a provocation: what would it mean to take the whispers of Nature's #MeToo seriously? Tracing the metaphorical and material parallels between the #MeToo movement and environmental justice struggles, I have argued that ecological degradation is best understood not as an unfortunate by-product of progress but as systemic abuse, perpetrated through unequal power, extracted from voiceless bodies, enforced through the silencing and killing of witnesses, and shielded by industrial-scale denial. The testimonies assembled here—from Flint's poisoned pipes and Cancer Alley's toxic air to the 146 environmental defenders killed or disappeared in 2024 and the disinformation deluge surrounding COP30—reveal a grammar of violence that any survivor of gendered abuse would recognise instantly (Bullard, 1990; Fleck, 2025a; 2025b; Hanna-Attisha et al., 2016).

Yet the analysis also reveals grounds for hope. The green silence is being broken: by the tree-huggers of Uttarakhand and the tree-planters of Kenya, by Indigenous cosmologies that have never ceased to regard rivers as kin, by courts that now grant rivers legal personhood, and by gender-transformative transitions taking shape from Gujarat to Fiji to La Mojana (Biswas & Ryan, 2025; Maathai, 2004; O'Donnell & Talbot-Jones, 2018; Sharma, 2013; Singh, 2014; UNRISD, 2025). The ozone layer's ongoing recovery proves that believed testimony can translate

into planetary repair (Buchholz, 2023), while the striking cost-effectiveness of forest restoration confirms that the most reparative technologies are often the oldest and most relational ones (Gaudiaut, 2025).

The #MeToo movement transformed the world not by inventing new harms but by insisting that old harms be named, believed, and answered. Nature's #MeToo demands nothing less. It requires that we replace the extractive question—what can the Earth yield?—with the relational one: what does the Earth need in order to flourish, and what do we owe for the harm already done? Answering that question entails moving decisively from anthropocentric exploitation to relational care: honouring consent through free, prior, and informed processes; guaranteeing voice through the protection of defenders and the integrity of climate information; and enforcing accountability through rights-of-nature jurisprudence, reparative finance under Article 9.1, and gender-transformative just transitions (Bhattacharyya, 2019; 2025b; UNDP, 2025; UNRISD, 2025; WCED, 1987). The wilderness has been whispering its testimonies for generations. The task of our generation, as scholars, teachers, activists, and citizens, is not merely to hear Nature's #MeToo, but to believe it, and to act proactively.

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Ethical Approval

This is a perspective. The study is based on published literature and secondary data and does not require ethical approval as it involves no direct human participants or animals.

However, the manuscript has been prepared in accordance with the guidelines and protocols of Academic Writing. In addition, the author declares that no generative AI or AI-assisted technologies were used in the conception, research, writing and preparation of this article. However, in the final polishing of the manuscript, the author used a generative AI tool (Claude, Anthropic) for language editing, typos and grammar.

Conflict of Interest

I hereby confirm that I have no conflict of interest to declare.

Informed Consent

Not required.

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