



RETHINKING HOW YOUTH SHAPE THE FUTURE OF NATURE AND FINANCE

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Issue Brief

Executive Summary

This brief interrogates the financialisation of nature through Nature-based Solutions (NbS), examining how ecological restoration initiatives intersect with, and are often constrained by, market logics that commodify ecosystems. The central argument is that while NbS hold potential for addressing climate and biodiversity crises, their implementation through financial mechanisms such as carbon markets, ESG frameworks, and REDD programmes frequently reproduces colonial patterns of dispossession, erases Indigenous sovereignty, and prioritises instrumental valuation over relational ethics. However, when approached through the idea of custodianship rather than ownership, NbS can become instruments of justice, reciprocity, and regeneration. Youth, particularly those situated in the Global South, should be positioned not as passive inheritors of failing systems but as agents capable of reimagining nature-finance relationships to centre ecological integrity, community sovereignty, and transformative governance.

Introduction

The anxiety many youths experience regarding ecological futures is not irrational, but rather it reflects an acute awareness of systemic breakdown. Climate disruption has ceased to be a distant threat as it manifests in lived realities such as unprecedented heat events, volatile food systems, and accelerating biodiversity loss. Each environmental crisis reinforces the ideology that the institutional arrangements meant to safeguard planetary systems are failing. Beneath this ecological unravelling lies a deeper crisis of relationality. Dominant economic frameworks have positioned nature as property, resource reserves to be extracted, landscapes to be commodified, and ecosystems to be used as tools for profit. Yet diverse cultural traditions, from Indigenous communities recognising kinship with land (Celidwen et al. 2023), to Afro-diasporic practices honouring ancestral relationships with nature (Kumah-Abiwu, 2024), and Pacific Islander navigation traditions reading ecological systems (Fernandez-Velasco & Spiers, 2024), have always maintained reciprocal relationships with the living world. The crisis is not universal disconnection, but the dominance of a particular worldview that treats separation as inevitable.

Nature-based Solutions (NbS) emerge within this context as both pragmatic interventions and philosophical propositions. Operationally, they involve restoring wetlands to mitigate flood risk, establishing mangrove buffers against coastal erosion, and rewilding degraded landscapes to enhance carbon sequestration. NbS also encode relationships between society and ecology. They invite a fundamental question of whether we perceive nature as a mechanistic system requiring technical repair, or as a living assemblage with which we must cultivate reciprocal relationships? For example, a multinational corporation implementing monoculture tree plantations labels it "NbS," while an Indigenous community practising agroforestry within ancestral territories also calls their work "NbS". The concept depends entirely on who designs, controls, and benefits from its implementation.

The same economic logics that precipitated ecological collapse through extraction, accumulation, and commodification, are now being mobilised to financialise nature itself. While some financial mechanisms may indeed fund ecological restoration, they simultaneously risk entrenching inequality and deepening the alienation between communities and land. The youth hold the capacity to redefine what it means to value nature. The central question is not whether NbS matter, but rather who shapes their design and implementation, who captures their benefits, and whether they serve genuine ecological healing or merely provide legitimacy for extractive systems rebranded as sustainable.

Nature-based Solutions (NbS)

Nature-based Solutions represent actions that protect, restore, or sustainably manage ecosystems to address societal challenges including climate change, water security, disaster risk reduction, and food systems collapse (UNEA-5, 2022). Unlike grey infrastructure such as seawalls, dams, engineered drainage systems, NbS prioritise working through natural processes such as coastal mangroves absorbing storm energy, urban forests moderating heat islands and filtering air pollutants, and restored wetlands purifying water while sequestering atmospheric carbon. The IUCN (2020) characterises NbS as approaches that centre nature over purely engineered solutions, while explicitly balancing social, economic, and environmental trade-offs. This dual emphasis positions NbS not merely as technical interventions but as philosophical commitments, or rather as a reconfiguration from dominating nature towards collaborating with ecological systems.

Evaluating NbS effectiveness frequently relies on qualitative indicators that capture dimensions resistant to conventional quantification. Berlin's Biotope Area Factor, for instance, assesses how urban green infrastructure supports biodiversity while enhancing climate resilience (Anderson et al. 2023; Stange et al. 2022). Such metrics show that NbS cannot be reduced to carbon accounting alone, as they encompass cultural, ecological, and social dimensions that exceed a singular economic calculus. Yet access to NbS remains quite unequal. Youth across the Global South confront significant barriers in accessing relevant technologies, securing adequate funding, and obtaining necessary infrastructure (Fomunyam, 2020). If NbS are genuinely intended to serve both planetary health and human well-being, critical questions emerge as to who possesses the capacity to implement these solutions, and which communities remain systematically excluded from their benefits?

Concerns, Risks, and Global Governance of NbS

When ecosystems are translated into financial assets, fundamental transformations occur. Forests become valued not for their existence but for quantified carbon storage. Wetlands are assessed through cubic metres of water retention capacity. Biodiversity is "banked" as tradable units. This process of financialisation reconfigures living systems into commodities amenable to market exchange (Loftus & March, 2015; Smith, 2008). Markets emerge wherein nature's worth is determined solely by its economic function. While financialisation is not inherently detrimental, it carries profound structural risks. Green grabbing, the appropriation of land under environmental pretexts, frequently displaces Indigenous and rural communities who have stewarded these ecosystems across generations (Bluwstein et al. 2018; Fairhead et al. 2012). Conservation initiatives then become exclusionary with restoration projects framed as climate mitigation entrenching into neo-colonial patterns of land control (Unks et al. 2023).

Equally problematic is the process of abstraction. When ecosystems are reduced to accounting entries, their cultural, spiritual, and relational dimensions are rendered invisible (Cuckston, 2018). A wetland becomes a carbon sink rather than a sacred site or livelihood foundation (Himick & Brivot, 2018). Accounting frameworks struggle to capture what resists quantification and quantitative efficiency in turn eclipses qualitative meaning (Arjalies & Gibassier, 2023; Kurunmaki et al. 2016).

The Global North-South Divide

NbS are embedded within deeply asymmetric global governance structures. Wealthy nations in the Global North shape climate diplomacy frameworks, develop standardised environmental metrics, and dominate green finance flows, with a 2017 analysis that indicated green financial initiatives aimed at emissions reduction covered 79% of the green bond market (Okulo, 2022; OECD, 2017). Meanwhile, communities in the Global South that frequently bear disproportionate climate vulnerability, encounter systematic barriers to accessing funding, appropriate technologies, and substantive decision-making power. This configuration produces a troubling dynamic, in that, the nation's most responsible for precipitating ecological breakdown now establish the terms for its remediation. Sustainability becomes another domain in which structural inequalities are reproduced (Ekes & Prudham, 2015). Whose understandings of nature, value, and

restoration are legitimised? Who accumulates wealth from green investments, while others absorb their costs? Global environmental governance increasingly operates through planetary-scale frameworks such as Earth system boundaries, climatic tipping points, and integrated socio-ecological models (Galaz et al. 2018; Steffen et al., 2018; Lenton et al., 2008). While I support and engage in research on these scientific essentials, they risk flattening situated knowledges and lived experiences into universalising abstractions through the concept of **telecoupling** (Liu et al. 2015). Factors such as community forests and ancestral watersheds become vulnerable to erasure when metrics dominate governance logics.

Young people situated in the Global South should not be considered as passive recipients of Northern-designed interventions. They bring alternative understandings, embodied experiences of ecological interdependence, and refusal to naturalise extractive logics (Ouma et al. 2018; Andreucci et al. 2017). They also possess the capacity to interrogate technocratic framings and foreground justice, reciprocity, and care in NbS design and governance, as evidenced by the Global Youth Position Statement on NbS, a joint statement by the Global Youth Biodiversity Network (GYBN), YOUNGO and Youth4Nature. The question is not whether to engage financial systems or global governance, but how to fundamentally transform them. Can youth-led movements reclaim NbS as instruments of decolonisation rather than dispossession? Addressing this requires examining concrete mechanisms through which financialisation operates.

Finance, ESG, and Disentanglement in Nature Valuation

Finance is not external to the Earth system, but rather constitutively embedded within it. Economic stability depends on factors of ecological stability such as predictable climate patterns, functioning hydrological cycles, and intact biodiversity. Yet financial systems historically externalised nature and treated it as an inexhaustible resource reservoir rather than recognise its ecological limits. As these limits became undeniable, finance attempted to "internalise" nature through Environmental, Social, and Governance (ESG) criteria and green investment mechanisms (Ioannou & Serafeim, 2015; Eccles et al. 2012). ESG frameworks purport to integrate environmental and social considerations into corporate governance and investment portfolios (Chiapello, 2014). However, financialising ESG frequently requires disentangling nature from people, abstracting ecosystems into measurable, and tradable units capable of circulating through global markets (Cuckston, 2018; Cooper et al. 2016).

Case Study: Analysing Disentanglement Through Policy - REDD

The Reducing Emissions from Deforestation and forest Degradation (REDD) mechanism illustrates this tension. REDD generates financial value by quantifying carbon stored in forests, enabling wealthy nations and corporations to offset emissions by financing forest conservation elsewhere (UNFCCC, 2015; 2010a; 2010b). Forest carbon is transformed into a tradable commodity. Operationalising this requires complex metrological systems, that is, standardised measurement frameworks designed to quantify carbon stock, for measuring, verifying, and monitoring carbon (IUCN, 2017; World Bank, 2016). Forests are reframed through accounting logics that privilege quantifiable dimensions of carbon tonnage, over aspects resistant to measurement such as cultural significance, biodiversity relationships, and Indigenous sovereignty (UN, 2018a; Natural Capital Coalition, 2016; TEEB, 2010). Ecosystems in turn become balance sheet entries (Lehman, 2017; McNicholas & Windsor, 2011).

However, it is worth acknowledging that REDD mechanisms continue to evolve. REDD frameworks now recognise Indigenous rights and biodiversity protection (CBD, 2009; UNDRIP, 2007), yet implementation frequently fails (Greenpeace, 2008; Global Forest Coalition, 2013; 2012; 2007; Global Witness, 2012; 2008). Indigenous-led alternatives such as Amazonian Territorial Protocols and community-controlled REDD+ programmes demonstrate ongoing contestation (Osborne et al. 2024). Decision-making authority transfers from those inhabiting forests to distant actors. This shift benefits those who profit from carbon commodification (Forest Peoples Programme, 2009a, 2009b).

This reflects a deeper problem of instrumental valuation. Nature is valued exclusively for human-oriented services such as carbon storage, flood mitigation, and pollination (Barter, 2015; Andrew et al. 2010), which while pragmatically useful for policy formulation, erases intrinsic worth and relational ethics. It interrogates "what nature can provide us" rather than "how we belong within nature" (Chelli & Gendron, 2013; Sandel, 2012). Financialisation of nature generates what scholars' term ecological and cultural overflows, that is, dimensions of existence that exceed, resist, or suffer harm through market logics (Mehrpuoya & Samiolo, 2016; Beunza & Stark, 2012; Stark, 2011). Examples would be sacred relationships to land that cannot be priced, intergenerational obligations to ancestors and descendants, or the intrinsic right of a river to flow.

Sacred sites, traditional ecological knowledge, and species interdependencies are few examples of what cannot be priced without epistemic violence, yet financial systems demand commensurable units, standardised metrics, and fungible assets. Herein lies the tension. Financial mechanisms like REDD gain legitimacy by promising conservation funding and climate action, yet they encounter moral limits when commodification alienates communities, undermines sovereignty, and reduces living systems to profit-generating opportunities (Ouma et al. 2018). Financialisation reconfigures Indigenous Peoples territories as "natural capital" and their stewardship practices as "ecosystem services", which in turn erases generations of reciprocal relationships and imposes market logics to which they never consented (Forest Peoples Programme, 2009a, 2009b). Biodiversity becomes portfolio holdings and forests become carbon repositories.

Cautionary note of Avoiding a New Wave of Green Grabbing

Land grabbing has not ceased, it has evolved in form, actors, and justificatory logic. What commenced as overt large-scale land acquisitions for food and biofuel production has transformed into subtler appropriations driven by climate finance, green investment portfolios, and conservation mandates (Serrano et al. 2025; Fairhead et al. 2012). Green grabbing now operates under climate action frameworks, rendering dispossession as not merely acceptable, but also virtuous. There are multiple factors that are enabling this. Geopolitical realignments have redirected capital flows toward "climate-resilient" assets, positioning land and ecosystems as prime targets for financial speculation (Bourgoin et al. 2025; Dell'Angelo et al. 2021). Farmland itself has undergone financialisation, traded as an asset class by pension funds, sovereign wealth funds, and private equity (Clapp, 2022; Stock & Gardezi, 2022; Ouma, 2020). Climate mitigation policies also accelerate these dynamics, as carbon markets, biodiversity offsets, and REDD mechanisms create new value streams contingent upon land control (Dwyer & Lu, 2025; Bruna, 2024). Forests cease being merely resource bases but also become financial instruments. This reconfigures governance with investor-state relationships superseding community sovereignty, while safeguards that are purportedly supposed to protect rights frequently fail implementation (Borras & Franco, 2025a; 2025b; Hall, 2022).

REDD and Carbon Markets as Green Grabbing

REDD demonstrates green grabbing's operational logic. By commodifying forest carbon, it incentivises large-scale land enclosures framed as "conservation" (Fairhead et al. 2012; FAO, 2012). Indigenous and peasant communities who have stewarded these forests across generations confront displacement or access restrictions, and their presence is then recast as threatening carbon stocks (Zoomers & Otsuki, 2025; Mehta et al., 2012). Carbon markets reproduce this pattern globally. Projects claim ecological benefits while eroding local land rights, simplifying ecosystems into monocultural carbon plantations, and enriching intermediaries rather than communities (D'Odorico et al. 2024a; 2024b; Tilzey, 2024). Climate solutions become vehicles for foreignisation that transfer control over land and resources to distant actors possessing no territorial rootedness (Esteve-Jordà & Scheidel, 2025; Madgulkar & Dell'Angelo, 2025).

Emerging digital finance technologies introduce new dimensions to nature's financialisation. Regenerative Finance (ReFi), a blockchain-based systems claiming to democratise environmental funding, tokenises ecosystem services, carbon credits, and biodiversity assets (Roy & Zaher, 2025). Distributed Autonomous Organisations (DAOs) manage "natural capital" through algorithmic governance. These technologies warrant critical attention because they reproduce

financialisation logics under decentralised rhetoric, claim to empower communities while often obscuring new extraction forms, and appeal specifically to digitally native youth, making critical literacy urgent.

Green grabbing produces multiple interconnected harms that significantly impact both communities and ecosystems. Dispossession occurs when local communities are stripped of their ancestral territories, water sources, and the fundamental resources necessary for their livelihoods, often because of conservation initiatives or offset schemes (Unks et al. 2023). This loss is compounded by ecological simplification, where rich, biodiverse ecosystems are reduced to mere carbon monocultures, thereby compromising their resilience and overall ecological integrity. This in turn erodes governance structures, as the interests of investors frequently take precedence over democratic processes and the rights of customary governance systems (Unks et al. 2023). It is essential to recognise that green grabbing often presents false solutions, given that while it may address the symptoms of carbon emissions, it fails to tackle the underlying causes such as overconsumption, systemic inequality, and extractive economic models that perpetuate environmental degradation (Bluwstein et al. 2018).

From Ownership to Custodianship

Safeguards formally exist as there are requirements for free, prior, and informed consent, benefit-sharing mechanisms, and biodiversity protections, but enforcement remains systematically weak (Tramel, 2025; Borrás & Franco, 2025b). The crisis confronting this generation is not solely ecological, it is also fundamentally ideological. Centuries of ontologically positioning nature as property, as extractable resources, and as ownable commodities, have caused current planetary disruption. However, these systems do not have to be continued. Youth possess capacity to redefine nature's valuation by shifting from paradigms of ownership to custodianship. Custodianship involves recognising that humans do not possess land, but we belong to it. It involves caring for ecosystems not because they generate profit but because they constitute the metabolic foundations of life itself. This is not romantic idealism but pragmatic reimagination that aligns financial and ethical frameworks with ecological reality.

Moving from ownership to custodianship requires developing measurement frameworks that operationalise relational ethics. Relational value frameworks recognise reciprocal relationships between humans and ecosystems as legitimate bases for decision-making, which in turn shifts the narrative from what nature is worth to what responsibilities our relationship with nature involves (Campbell & Gurney, 2023; Beery & Lekies, 2021; Himes & Muraca, 2018). Traditional Ecological Knowledge (TEK) indicators assess ecosystem health through cultural, spiritual, and subsistence dimensions (Mashizi & Escobedo, 2025; Berkes, 2024; Kant & Anjali, 2021). Rights of Nature legal frameworks constitutionally recognise rivers, forests, and ecosystems as rights-bearing entities (Kahui et al. 2024; Yanquiling et al. 2024; Weis & Mullins, 2025).

Youth are already pioneering these transformations by participating in community-led NbS initiatives, Indigenous-youth solidarity networks, and climate justice movements centring care over capital accumulation; a perfect example that shows alternatives exist and function. The infrastructure is available with digital technologies, global networks, and accessible knowledge systems. What remains essential is the political will to deploy them otherwise.

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