**CIEL Submission to SR on Human Rights and the Environment**

**July 2020**

As widely understood in the field of human rights and the environment, biodiversity is a foundation of healthy ecosystems, and thus preserving and enhancing biodiversity is a critical imperative for upholding the fullest realisation of human rights obligations. Yet, biodiversity is at a severely heightened risk globally, as highlighted by the most recent IPBES Global Assessment. Up to 1 million species are threatened with extinction, many within decades, due to unsustainable development and industrial practices worldwide.[[1]](#footnote-1) The Global Assessment Report found a 47% reduction in global indicators of ecosystem condition when compared to their estimated natural baseline, highlighting the urgent need to mitigate biodiversity loss.[[2]](#footnote-2) Since 1970, the world has lost 60% of its global vertebrate population, and more than 40% of insect species are declining rapidly.[[3]](#footnote-3)

Preserving and enhancing global biodiversity is imperative to the full realization of human rights, as identified by former Special Rapporteur John Knox in a report highlighting that the full enjoyment of human rights is dependent on services provided by ecosystems, known as ecosystem services [[4]](#footnote-4) Biodiversity loss undermines health and wellbeing, as it threatens ecosystem services which support the right to life, health, food, water, culture, and non-discrimination.[[5]](#footnote-5) As biodiversity loss is occurring at an alarming and unprecedented rate outlined above, there is an immediate necessity of addressing this ongoing crisis through all legal and policy avenues in the international sphere.

This submission discusses biodiversity, healthy ecosystems and human rights in relation to several topics, namely: geoengineering; fossil fuel-derived plastics, pesticides and fertilizers; and biodiversity risk monitoring by financial institutions.

**Geoengineering**

As discussed extensively in CIEL’s 2019 report, *Fuel to the Fire: How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis*, and as addressed in a separate submission to the Special Rapporteur on behalf of Biofuelwatch, ETC Group and Heinrich Böll Foundation,[[6]](#footnote-6) geoengineering poses both direct and indirect risks to biodiversity, healthy ecosystems and human rights. Geoengineering refers to a diverse array of theories, strategies and technologies that involve deliberate large-scale intervention in the Earth’s climate system.[[7]](#footnote-7) Such technologies can broadly be divided into two classes: those that purport to remove carbon dioxide from the atmosphere (carbon dioxide removal or CDR, also known as “negative emission technologies”), and those that aim to alter the Earth’s balance of solar radiation (solar radiation modification or SRM).[[8]](#footnote-8)

In terms of direct risks, technologies that aim at large-scale intervention in climate systems may unleash irreversible impacts on terrestrial, forest, marine and other ecosystems, the full nature and extent of which are yet unknown. If pursued widely, some technologies, such as bioenergy with carbon capture and storage (BECCS), would not only entail massive diversion of arable land for monocrop fuel production, with consequent impacts on biodiversity, food security, land tenure, livelihoods and water supplies. At scale, BECCS would also generate significant direct CO2 emissions due to land cover change, loss of forests and grasslands, soil disturbance, and increased use of agricultural chemicals, as well as from the combustion of the bioenergy itself.[[9]](#footnote-9)

Indirectly, geoengineering poses a potential threat to human rights and healthy ecosystems due to its anticipated impacts on the speed and ambition of fossil fuel reduction. CDR and SRM schemes may divert resources and efforts away from the most reliable way to mitigate climate change and respect human rights: a rapid, equitable managed phase-out of fossil fuel use. Geoengineering has been and continues to be heavily promoted by the fossil fuel industry, as a way to delay or minimize climate action and prolong business-as-usual fossil fuel use.[[10]](#footnote-10)

The Inter-governmental Panel on Climate Change (IPCC) has expressed concern about reliance on geoengineering technologies, given continued uncertainties about their economic and technical viability and their likely social and environmental impacts. The IPCC has declined to incorporate any SRM into its model emission pathways to a 1.5 degree scenario. [[11]](#footnote-11) And although it incorporated some reliance on CDR into three of its four pathways, the IPCC has nevertheless cautioned with “high confidence” that CDR remains “uncertain” and “associated with challenges and risks,” including potentially significant impacts on land, energy, water or nutrients if deployed at scale.[[12]](#footnote-12)

***State obligations*:** Under the precautionary principle,[[13]](#footnote-13) the uncertainty around the effects of geoengineering and the risks of its significant and potentially irreversible impacts on biodiversity, ecosystem health and human rights, should not impede states from taking measures to prevent or minimize such risks. Such measures may include moratoria on the deployment of geoengineering technologies at scale, and prohibitions on open-air experimentation. Moreover, the likely challenges of tracing harmful impacts to specific geoengineering interventions makes the prospect of accountability for those impacts remote, underscoring the importance of prevention.

***Best practices*:** Recognition of risks to biodiversity led the Convention on Biological Diversity (CBD) to recommend, in 2010, that all states party to the Convention place a moratorium on climate-related geoengineering unless and until its risks to the environment and biodiversity, and associated social, economic and cultural impacts, were fully assessed and effectively regulated under an agreed global governance regime. [[14]](#footnote-14) CBD has subsequently reaffirmed and extended this decision.[[15]](#footnote-15) Similarly, under the London Convention on the Prevention of Marine Pollution, states have agreed to prohibit a specific geoengineering technology, ocean fertilization, because of its potentially significant risks to marine ecology.[[16]](#footnote-16)

***Obstacles faced by civil society*:** One of the persistent barriers that civil society organizations face in working to prevent biodiversity harm and ecosystem damage due to the use of geoengineering technologies, is lack of access to information about or opportunities to participate in decision-making regarding geoengineering governance. The rights of access to information and participation in decision-making regarding environmental matters are protected under a variety of international human rights law instruments, including *inter alia* the International Covenant on Civil and Political Rights (ICCPR), the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, and Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement).[[17]](#footnote-17) Discussions about geoengineering are occurring in multiple fora, including in industry-led standard-setting bodies like the International Organisation for Standardisation (ISO), in which governments entities participate. The secrecy that shrouds the ISO process,[[18]](#footnote-18) and more broadly, the absence of public information around geoengineering investments and experiments, impedes public participation in debates and decisions that are critical to protecting biodiversity, ecosystem health and human rights, and indeed to the future of life on this planet as we know it.

***Opportunity***: The Special Rapporteur has previously expressed concern about the potentially massive human rights and biodiversity impacts of the deployment of “untested” technologies, such as SRM and ocean fertilization, among others, and cautioned against their use “until their implications are much better understood.”[[19]](#footnote-19) The Rapporteur has also acknowledged the risks posed by poorly implemented CDR, such as BECCS.[[20]](#footnote-20) The current report presents an opportunity: to reinforce and expound on that discussion of the potential risks of geoengineering to biodiversity and healthy ecosystems; to promote respect for existing *de facto* and *de jure* moratoria and prohibitions on the use of certain geoengineering technologies, consistent with the precautionary principle; and to underscore the importance of upholding the rights to information and participation in the context of discussions regarding geoengineering and any decisions concerning its deployment, regulation or governance.

**Fossil Fuel-Derived Plastics, Pesticides, and Fertilizers Threaten Biodiversity**

Much of the discussion regarding the impacts of fossil fuels on biodiversity and ecosystem health focuses on the upstream effects of oil, gas and coal extraction on local communities and environments, and the downstream effects of fuel combustion on the global climate. Less attention has been paid to date to the biodiversity and ecosystem impacts of downstream industries dependent on fossil fuel derivatives, petrochemicals and other chemical byproducts of oil and gas used to produce plastics, fertilizers and pesticides. Both the manufacture and end-use of these fossil fuel-based products pose risks to ecosystem health.[[21]](#footnote-21) The overuse of fossil fuel-derived pesticides is a major driver of biodiversity loss for an array of species, including pollinators, amphibians, and most fundamentally, insects.[[22]](#footnote-22) Global insect biomass has declined catastrophically in recent decades, jeopardizing both terrestrial and freshwater food webs. And microplastics, which are ubiquitous in the environment, contaminate and accumulate in food chains through agricultural soils, terrestrial and aquatic food chains, and the water supply, affecting biodiversity and human health.

***State obligations and corporate responsibility:*** Pursuant to their duty to protect human rights, states have an obligation to ensure that the production of fossil fuel-based fertilizers and pesticides does not endanger human health and the health of the ecosystems on which humans depend. That entails enacting sufficiently robust regulations of production processes, implementing regular monitoring and oversight to ensure compliance with those regulations, and providing access to remedy when violations occur. Corporations, in turn, have a responsibility to ensure that their operations do not cause or contribute to human rights violations and that when they do, they provide for or cooperate in the remediation of human rights and environmental harms.[[23]](#footnote-23)

***Opportunity:*** To date, many efforts to prevent the above-mentioned harms have focused on regulation of the sale, use and disposal of plastics, pesticides and fertilizers, not their production or the fossil fuel-derived inputs on which they depend. Much like the campaign to phase-out the use of oil, gas and coal as fuel, however, the push to reduce the use of plastics, chemical pesticides and fertilizers cannot focus only on the demand side; it must also look up the chain, to stem the glut of supply at its source. The Report on Healthy Ecosystems and Human Rights provides an opportunity to highlight the connection between the fossil fuel industry and the downstream biodiversity impacts of the plastics, pesticides and fertilizers derived from it, and to emphasize that to be effective, solutions must also address the source of the harmful products.

**Obligations of Financial Actors to Safeguard Healthy Ecosystems**

There is an immediate need to underscore the duties of financial actors to both assess and mitigate the risk of harm on biological diversity resulting from their investments through appropriate biodiversity monitoring and disclosure, in order to uphold the full extent of international human rights obligations. Similar to the importance of climate-related risk disclosure and monitoring in financial institutions, better governance of financial institutions can preclude the further investment in industries and practices which threaten global biodiversity loss. The prevention of biodiversity damage is only possible through a holistic approach to the monitoring, assessment, and disclosure of biodiversity risks in the early stages of project development within financial institutions, ultimately preventing large-scale development projects which threaten biodiversity.

***Upholding Human Rights Obligations***:

The relevance of biodiversity risk monitoring, assessment, and disclosure, can be further linked to previous reports of the Special Rapporteur. For example, Paragraph 78 of the Issue of Human Rights Obligations Relating the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment, stated that “International financial mechanisms should ensure that the projects that they support *do not cause environmental harm*… and include appropriate protections in their environmental safeguards.”[[24]](#footnote-24) Additionally, it has been identified by the Special Rapporteur that international financial institutions, as well as State agencies that provide international assistance, “should adopt and implement environmental and social safeguards that are consistent with human rights obligations, including by: requiring the *environmental assessment* of every proposed project and requiring legal and institutional protections against environmental risks”.[[25]](#footnote-25)

***Best practices*:**In its Draft Monitoring Framework for post-2020 Global Diversity Framework, the Convention on Biological Diversity (CBD) includes in Goal B of its 2030 Milestones the provision of valuing nature through *private sector financial disclosure*.[[26]](#footnote-26) This goal is echoed in its 2030 Updated Targets, Row 178, to include developing and applying biodiversity risk assessment policies and processes within the financial sector’s monitoring elements. By 2030, this monitoring requirement under the CBD should ultimately demonstrate “decreasing negative impacts on ecosystems and biodiversity” in the portfolios of financial actors and institutions.[[27]](#footnote-27)Additionally, a growing momentum behind the concept of a Task Force for Nature Impacts Disclosure, proposed by Axa and WWF for the G7 in 2019, based on the Task Force for Climate Disclosure, advocates for the required disclosure of material biodiversity related risks.[[28]](#footnote-28) Additionally, the Central Bank of the Netherlands has started to actively measure the impact of biodiversity-related financial risks on the Dutch financial sector in order to indicate the importance of preventing biodiversity loss.[[29]](#footnote-29) Furthermore, movement towards better governance on this issue remains crucial, as there remain considerable gaps and inconsistencies in biodiversity finance reporting and tracking.[[30]](#footnote-30)

***Opportunity***: With the evidence presented above, a critical window of opportunity presents itself under the upcoming report on Healthy Ecosystems and Human Rights. This opportunity should be utilized as a platform to illuminate the necessity for states and financial institutions to assess and mitigate damage to biodiversity through disclosure of biodiversity hazards in financial monitoring and reporting systems, to ultimately preclude investment in and perpetuation of economic practices damaging precious ecosystem services vital to the full realisation of human rights.

1. IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. [↑](#footnote-ref-1)
2. *Ibid*  [↑](#footnote-ref-2)
3. OECD (2019) “Biodiversity: Finance and the Economic and Business Case for Action” <https://www.oecd.org/environment/resources/biodiversity/G7-report-Biodiversity-Finance-and-the-Economic-and-Business-Case-for-Action.pdf> [↑](#footnote-ref-3)
4. Special Rapporteur Report A/HRC/34/49 2017 <https://undocs.org/A/HRC/34/49> [↑](#footnote-ref-4)
5. *Ibid* [↑](#footnote-ref-5)
6. Biofuelwatch, ETC Group and Heinrich Böell Foundation (2020), Submission on the impacts of Climate Geoengineering on Biodiversity and Human Rights to the report on Healthy Ecosystems and Human Rights: Sustaining the Foundations of Life, https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Call/NGOs/BiofuelwatchETCHeinrichB%c3%b6llInputs.docx. [↑](#footnote-ref-6)
7. CIEL, *Fuel to the Fire*: *How Geoengineering Threatens to Entrench Fossil Fuels and Accelerate the Climate Crisis* (2019), at 4 n.4 [hereinafter *Fuel to the Fire*], <https://www.ciel.org/wp-content/uploads/2019/02/CIEL_FUEL-TO-THE-FIRE_How-Geoengineering-Threatens-to-Entrench-Fossil-Fuels-and-Accelerate-the-Climate-Crisis_February-2019.pdf>. [↑](#footnote-ref-7)
8. *Fuel to the Fire*, at 9 (explaining the two classes of technologies and acknowledging the few techniques that do fall into either CDR or SRM). In addition to afforestation and reforestation, the most widely discussed CDR techniques include bioenergy with carbon capture and storage (BECCS), direct air capture with carbon capture and storage, enhanced weathering, ocean alkalinization, and ocean fertilization. SRM includes such technologies as atmospheric aerosol injection, marine cloud brightening, and modifying the reflectivity of polar ice. [↑](#footnote-ref-8)
9. *Fuel to the Fire*, at 31. [↑](#footnote-ref-9)
10. *Fuel to the Fire*, at 5, 60. [↑](#footnote-ref-10)
11. *Fuel to the Fire*, at 8. IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)], at 12 (para C.1.4). <https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf> [↑](#footnote-ref-11)
12. IPCC Summary for Policymakers, at 12, <https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_summary-for-policymakers.pdf>; CIEL, ETC Group, Heinrich Boell Stiftung, *Briefing Note on ISO draft guidance standard on radiative forcing management* (ISO/NP 14082) (2019), at 6 n. 20, <https://www.etcgroup.org/sites/www.etcgroup.org/files/files/geoengineering_iso_brief_sep2019.pdf>. *See also* Heleen de Coninck et al., *Strengthening and Implementing the Global Response*, in *Global warming of 1.5°C* at 316-317, § 4.3.7 (V. Masson-Delmotte et al. eds., 2018), https:// www.ipcc.ch/site/assets/uploads/ sites/2/2019/02/SR15\_Chapter4\_Low\_Res. Pdf. [↑](#footnote-ref-12)
13. See, e.g., Rio Declaration 1992, Principle 15; Convention on Biological Diversity 1992, preamble; *see also* Human Rights Committee, General Comment No. 36: Article 6 Right to life, UN Doc. CCPR/C/GC/36, at para 62 & n. 251(2019) (stating that the right to life should inform states parties’ obligations under international environmental law and that states should “pay due regard for the precautionary approach”). [↑](#footnote-ref-13)
14. See *Climate-related Geoengineering and Biodiversity*, Convention on Biological Diversity, <https://www.cbd.int/climate/geoengineering/> (last visited 25 June 2020). [↑](#footnote-ref-14)
15. *Ibid* [↑](#footnote-ref-15)
16. Resolution LP.4(8) on the Amendment to the London Protocol to Regulate the Placement of Matter for Ocean Fertilization and Other Marine Geoengineering Activities LP.8. LC 35/15. Annex 4. Annex 5. 2013. [↑](#footnote-ref-16)
17. ICCPR, 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976), art. 19; Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 25 June 1998, 2161 UNTS 447, art 4(4) (entered into force 30 October 2001). [↑](#footnote-ref-17)
18. For more discussion on ISO’s development of a standard that could promote and facilitate deployment of geoengineering technologies, see CIEL, ETC Group, Heinrich Boell Stiftung, *Briefing Note on ISO draft guidance standard on radiative forcing management* (ISO/NP 14082) (2019), <https://www.etcgroup.org/sites/www.etcgroup.org/files/files/geoengineering_iso_brief_sep2019.pdf>. [↑](#footnote-ref-18)
19. See Safe Climate: A Report of the Special Rapporteur on Human Rights and the Environment, UN Doc. A/74/161, at para. 83 (2019) (by David Boyd), <https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf> [↑](#footnote-ref-19)
20. *Ibid* at para 21. [↑](#footnote-ref-20)
21. See, e.g., Barbara A Demeneix, *How fossil fuel-derived pesticides and plastics harm health, biodiversity, and the climate*, 8 The Lancet 462-64 (2020);CIEL, Fueling Plastics, <https://www.ciel.org/reports/fuelingplastics/>; CIEL, *Plastics and Health: the Hidden Costs* *of a Plastic Planet* (2019), <https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf>. [↑](#footnote-ref-21)
22. See, e.g., Report of the Special Rapporteur on the Right to Food and the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, UN Doc. A/HRC/34/48, at paras. 3, 32, 41 (2017). [↑](#footnote-ref-22)
23. See United Nations Guiding Principles on Business and Human Rights, UN Doc.HR/PUB/11/04, princs. 11-13, 22 (2011). [↑](#footnote-ref-23)
24. Paragraph 78 of the Special Rapporteur’s “Issue of human rights obligations relating the the enjoyment of a safe, clean, healthy, and sustainable environment” Human Rights Council 37th Session 2018 [↑](#footnote-ref-24)
25. Paragraph 39 of Report of the Special Rapporteur on ``The issue of human rights obligations relating the enjoyment of a safe, clean, healthy, and sustainable environment” Human Rights Council 37th Session, 2018. [↑](#footnote-ref-25)
26. *Convention for Biological Diversity*, Draft monitoring framework for the post-2020 global biodiversity framework for review<https://www.cbd.int/sbstta/sbstta-24/post2020-monitoring-en.pdf> [↑](#footnote-ref-26)
27. *Ibid*  [↑](#footnote-ref-27)
28. AXA and WWF (2019), *Into the wild - Integrating nature into investment strategies*, AXA and WWF [↑](#footnote-ref-28)
29. Dutch Central Bank (2020), *Indebted to nature – Exploring biodiversity risks for the Dutch financial sector,* [https://www.dnb.nl/en/binaries/Indebted to nature \_tcm47-389172.pdf](https://www.dnb.nl/en/binaries/Indebted%20to%20nature%20_tcm47-389172.pdf) [↑](#footnote-ref-29)
30. OECD (2019) “Biodiversity: Finance and the Economic and Business Case for Action” <https://www.oecd.org/environment/resources/biodiversity/G7-report-Biodiversity-Finance-and-the-Economic-and-Business-Case-for-Action.pdf> [↑](#footnote-ref-30)