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The CBD must step up to break the destructive climate–biodiversity cycle

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Climate breakdown and biodiversity loss are two sides of the same crisis. As the climate heats, ecosystems collapse faster. This happens due to shifting rainfall patterns, more frequent extreme events disrupting ecosystems, degrading habitats, and exceeding species' ability to adapt or migrate. Also the spread of devastating forest fires destroys biodiversity while accelerating global heating. As biodiversity is destroyed, the planet's capacity to regulate the climate weakens.

Climate policies must not harm biodiversity

CBD Parties must ensure that no climate policy undermines biodiversity. The Convention should clearly warn the UNFCCC and national climate policy makers that biodiversity-harming measures will inevitably worsen climate disruption.

Offsetting policies are a clear example. The idea that ecosystems already under stress can act as carbon sinks for continued emissions is a dangerous illusion. Yet the draft CBD decision on climate and biodiversity leans heavily towards carbon offsetting. The CBD fails its vital role as the guardian of biodiversity and of warning the UNFCCC about the dangers of treating biodiversity merely as a carbon sink. Ultimately, it can't be a sink if it is collapsing under the impacts of climate change.

"Nature-Based Solutions" (NbS) often reproduce the same problem. Particularly large-scale NBS projects predominantly centre on offsetting and monoculture tree plantations. They rely on chemicals, deplete water, increase fire risk, and displace communities—all for short-lived carbon storage. There are many examples of corporate NBS projects with no ecological value that are presented as "forest restoration", such as planting monoculture tree plantations in the savannah. Yet, they serve to greenwash the corporation's operations.

Geoengineering: high risk, low accountability

Geoengineering proposals—such as solar radiation management, marine geoengineering, and large-scale carbon removal and storage projects —pose enormous ecological risks. However, there are many new open-air experiments ongoing or projected. This makes it essential for the CBD to reaffirm and strengthen the precautionary principle and ensure its climate geoengineering moratorium decisions are respected in the work of all the Rio Conventions.

Human rights and governance failures

Across offsets, plantations, and geoengineering schemes, one pattern repeats: disproportionate harm to Indigenous Peoples, local communities, and women. Land appropriation, criminalisation of resist-

ance, and exclusion from decision-making are systemic. These are not side effects—they expose governance failure.

Human rights obligations in the GBF must be translated into binding regulations: secure land tenure, FPIC, gender justice, and direct support for community governance.

Aligning climate and biodiversity action

The CBD should do a systematic review of all climate policies being implemented, proposed or promoted by any international body, including the UNFCCC, UNEP, UNDP, the World Bank, the IMF, Development banks and others. If there are negative implications for biodiversity, this should be duly communicated, and where necessary, such policies need to be prohibited. At the national level, biodiversity policy makers should also raise red flags when climate policies threaten local biodiversity.

True solutions begin with reducing harm. Tackling the drivers—industrial agriculture, fossil fuels, extractivism, overconsumption, and financial systems built on endless growth—is indispensable. Protecting and restoring ecosystems can only succeed if these pressures are curtailed. The IPBES Transformative Change Assessment must guide implementation to break the destructive feedback between biodiversity loss and climate breakdown.

Read Friends of the Earth's full report "Climate and Biodiversity in Freefall" here: www.foei.org/publication/climate-and-biodiversity-in-freefall

Precautionary risk assessment needed to confront new LMO threats

Eva Sirinathsinghji, Third World Network

Emerging applications of living modified organisms (LMOs) present potentially irreversible risks and challenge current risk assessment frameworks. While first-generation living modified (LM) crops—primarily herbicide-tolerant and insect-resistant varieties—have long been criticized for their impacts on biodiversity, health, and traditional agriculture, newer biotech proposals introduce even more complex biosafety concerns.

The biotechnology industry is expanding into riskier domains, broadening the potential species range, trait type, and applications. These new LMOs pose heightened risks due to their potential for uncontrollable spread, persistence, reproductive capability, and unknown ecological impacts. Knowledge gaps about their biology and interactions with ecosystems make thorough risk assessment difficult, especially regarding transboundary movement and the rights of potentially affected communities to free, prior and informed consent.

In response, the Ad Hoc Technical Expert Group (AHTEG) on Risk Assessment has recommended developing further guidance materials in four key areas: LM microorganisms, LM algae, LM fish, and LMOs expressing genome editing machinery for pest or pathogen control. These recommendations should be supported as further guidance is necessary to address the biosafety challenges posed by these applications.

Furthermore, first-generation LM crops continue to threaten food sovereignty and genetic diversity, especially in centres of origin and traditional agricultural systems. As more products including those with genetically stacked traits enter the food supply, long-term and cumulative effects become more pressing concerns. Thus, the development of technical notes on these two topics, as recommended by the AHTEG, would be useful.

The process of developing any further guidance materials needs to be alert to industry attempts to narrow and weaken risk assessments. The guidance materials should be grounded in the precautionary principle and Annex III of the Cartagena Protocol, ensuring comprehensive evaluation of unintended effects. The Protocol must remain a robust regulatory tool—not a formality for approving risky technologies.

Precaution on Geoengineering: Essential for the synergy of Rio Conventions

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In a series of pioneering precautionary decisions, the CBD agreed by consensus to prevent the impacts of climate geoengineering on biodiversity and livelihoods. The first decision on ocean fertilization was adopted in 2008 followed by another one on all forms of geoengineering in 2010. Both were reaffirmed by several COP decisions, latest in 2024.

The CBD decisions on geoengineering need to be explicitly taken into account in any joint work program of the Rio Conventions to enhance the positive synergy of the Rio Conventions and ensure that actions on climate change, desertification and land degradation go hand in hand with protecting biodiversity, livelihoods, rights and precaution.

Geoengineering is set of speculative large-scale technological proposals that doesn´t address the roots causes of climate change, prolong dependence on fossil fuels and could pose unprecedented risks to the environment and human rights.

CBD decision X/33 para 8 (w) from 2010 calls on Parties to ensure that no geoengineering activities that affect biodiversity take place until various criteria are met, including a science based, global, transparent and effective control and regulatory mechanism, an adequate scientific basis to justify such proposals and that biodiversity, social and cultural impacts are prevented. The decision made an exception for small-scale scientific research studies in controlled settings. It is also 'in line and consistent with' decision IX/16 C on ocean fertilization (a form of marine geoengineering) which explicitly rules out any commercial purpose in such research studies.

Despite these well-founded precautionary decisions, in recent years there has been a proliferation of outdoor geoengineering experiments and projects, on marine, solar and very large-scale terrestrial proposals with significant negative impacts.

Over 40 companies are conducting or planning open sea experiments including ocean fertilisation, ocean alkalinity enhancement, industrial seaweed cultivation and sinking; most with a commercial element; at least half are selling carbon credits in voluntary markets, despite lack of evidence of sequestration and permanence.

There are also very concerning examples of outdoor experiments and even commercial projects on solar geoengineering, e.g. Stardust in Israel.

Several of these projects have been stopped by opposition of indigenous peoples and the communities in the areas affected, who denounced the violation of their rights and the impacts on territories, livelihoods and biodiversity, based on CDB decisions.

Because none of the elements that led to the CBD decisions have been yet met, and concerned by the proliferation of risky outdoor experiments, the COP 16 in Cali reaffirmed all prior geoengineering decisions and urged Parties to ensure its implementation (dec XVI/22 para 6). The CBD must now take actions to

esure other conventions respect the moratorium and encourage them to incorporate the implementation of the relevant decisions in their work programs.

Transform, not Reform!

Third World Network

Why have efforts to halt the destruction of biodiversity largely failed?

A major reason is the failure to confront the root causes of the biodiversity crisis, resulting in outcomes that are incremental, insufficient, or ineffective. As such, the emphasis has been on reforming rather than transforming dominant systems.

Responses which "tinker at the edges" often end up legitimizing, entrenching, or even expanding the very systems that drive biodiversity destruction. For example, biodiversity offsetting schemes often permit the very activities that imperil ecosystems while giving the impression of environmental protection.

Two recent IPBES assessments—the Transformative Change Assessment and the Nexus Assessment—offer key insights into why states continue to fall short of biodiversity goals.

The Transformative Change Assessment emphasizes three key underlying causes of biodiversity destruction: (a) disconnection from and domination over nature and people; (b) concentrated power and wealth; and (c) the prioritization of short-term, individual, and material gains. As such, vested interests, backed by substantial financial and political power, maintain these structures, often co-opting or neutralizing attempts to enact change.

Global power imbalances, especially in the international monetary and financial system, exacerbate structural inequalities. Disparities within and between developed and developing countries further entrench inequalities. Addressing biodiversity destruction thus requires confronting underlying drivers such as the inequitable global debt architecture, transnational tax regimes, and the extractive logics embedded in trade and investment systems. The Nexus Assessment goes so far as to suggest that strategies not traditionally focused on or explicitly aimed at biodiversity—such as transforming economic and financial systems—can often yield greater biodiversity benefits than conventional conservation measures.

Transformative change thus requires curbing the power of corporate actors, financial elites, and the governments that enable them, while redistributing power to those most affected by ecological collapse, including Indigenous Peoples, local communities, and other rights-holders. Real mechanisms for redistribution—such as through tax and debt justice, the democratization of economic institutions, and payments for ecological debts—are needed. These efforts must also firmly uphold land rights and other human rights.

Based on *Transform, not reform: Transformative change to stop the biodiversity crisis*
https://www.twn.my/title2/briefing_papers/twn/Transformative change TWNBP Oct 2025 Steichen.pdf