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Biodiversity and climate change

Third World Network

Biodiversity does play a critical role in addressing climate change, by contributing to resilience and adaptation, as well as mitigation by acting as carbon sinks. There has been increasing attention on the potential of biodiversity to contribute to keeping global temperature rise below 1.5C. However, this must not substitute for the urgent need for rapid emissions reductions, which should be carried out in an equitable manner. The less that fossil fuel emissions are reduced, the greater the need for sinks. This will disproportionately shift the burden to biodiverse-rich countries, which are largely in the South, while the North is able to continue its high-emissions trajectories.

Ecosystem-based approaches are clearly the correct biodiversity approach to climate change, with the focus on conserving, sustainably using and managing biodiverse ecosystems and managed ecosystems, as well as the critical ecosystem functions they provide, in order to contribute to both adaptation and mitigation.

The problem with the term "nature-based solutions"

The term "nature-based solutions" is being used in the Zero Draft in places, instead of well-defined terms such as "ecosystem-based approaches", which is problematic for several reasons.

The term "nature-based solutions" is ambiguous and as currently used conflates natural ecosystems such as forests, soils, grasslands, estuaries and mangroves with, for example, monoculture tree plantations, which would clearly not provide the same benefits, whether in terms of mitigation, adaptation or other ecosystem functions. IUCN defines "nature-based solutions" as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits".

In target 6 of the Zero Draft, there are figures proposed for the potential of "nature-based solutions" to contribute to climate mitigation. However the first figure given – "about 30%" – comes from a scientific study which evaluated the mitigation potential for a group of 20 very specific "natural climate solutions", not the much more ambiguous category of "nature-based solutions."

It is not possible to assign a numerical target to a category of "solutions" that are not at all defined. The

In this issue:

- Biodiversity and climate change
- Australia's summer of fire
- Wildlife conflicts vs Interactions

post-2020 Global Biodiversity Framework (GBF) should use well-defined terms, such as "ecosystem-based approaches" rather than vague categories that are not defined in previous CBD decisions or in the scientific literature.

How should climate change be addressed in the GBF?

The focus of the CBD and the GBF should be on protecting terrestrial and marine ecosystems and the communities that inhabit, protect, and manage those ecosystems, and their rights. In so doing, this also contributes to climate regulation (both mitigation and adaptation).

As such, any goal or target related to climate change in the GBF should focus on the following:

* Limiting the impacts on biodiversity from climate change, as well as from actions and measures to address the climate crisis.

* Enhancing the integrity of terrestrial and marine ecosystems, which also contribute to adaptation, mitigation, and reducing climate impacts.

* Protecting the forests and soils under the control of indigenous peoples and local communities, which are also storing carbon, by strengthening indigenous and community rights over those lands and territories.

The CBD should not be used instrumentally to achieve the goals of the Paris Agreement for which those Parties have obligations to reduce their emissions, in particular the high-emitting North. Neither should the biodiversity in biodiverse-rich countries in the South be grabbed by high-emitting rich countries to offset their emissions.

Australia's devastating summer of fire

James Trezise, Australia Conservation Foundation

In 2019, before the southern hemisphere summer and fire season even began, Australia, a mega-diverse country with 80% of its wildlife found nowhere else on earth, started to burn. Bushfires are a part of Australian life, but the fires that ripped through the eastern, southern and western states of Australia were, in all regards, unprecedented. Unprecedented in terms of their size, their duration and their intensity. These fires were fueled by record high temperatures and drought driven by climate damage.

The impacts on people and communities of the Australian fires were nothing short of devastating. The fires sadly took the lives of 34 people and destroyed

more than 2,400 homes. Our major cities remained choked in smoke for much of the summer, leading to serious health impacts for millions of people. Australia's capital, Canberra, reached an air quality index exceeding 7,000 ppm and major sporting events across the country were cancelled.

The fires destroyed more than 10 million hectares of forest, more than 20% of Australia's entire forest estate, a figure that is unprecedented globally. The impacts on wildlife have been devastating, with conservative scientific modelling estimating that more than 1 billion animals have perished in the fires. More than 330 nationally listed threatened and migratory species have been impacted by the firestorms and the fires have likely endangered many new species that were previously thought to be common. Impacts on koala populations were acute, with the species potentially threatened across its range following the fires.

Ecosystems, such as rainforests and alpine fens, that are not known to burn, were incinerated in fires across the east. Eighty-four nationally listed threatened ecological communities had more than 10% of their range impacted by fire, with four having more than 50% of their estimated distribution burned. The fires also devastated Australia's World Heritage Areas, with 80% of the Blue Mountains World Heritage Area and 50% of the NSW areas of the Gondwana rainforests being burnt.

A crisis in the making

The fires came on the back of a decade of declining investment in conservation nationally. Lack of resourcing for conservation programs and park management agencies preceding the fires significantly impeded the ability of experts to respond and species to recover. The fires compounded a dire situation for Australia's biodiversity. Declining conservation investment and weak environmental laws meant Australia had already seen more than 7.7 million hectares of threatened species habitat destroyed between 2000 - 2017.

Lessons for the CBD

It is well understood that intact forests in Australia are far more resilient to fire, whilst modified and logged eucalypt forests have been shown to burn faster and hotter. Whilst many Australian forest types are adapted to fire, they are not adapted to burn as hot and as frequently as has occurred in some forests in recent decades. Australia was the world's crystal ball this southern summer – a snapshot into what our collective future looks like in a climate damaged world.

The lessons for the CBD are clear: we need to be *truly* bold and ambitious. We need to conserve our remaining intact ecosystems, tackle extinction and invest in the recovery of species and their habitats. For decades we have been watching the world's natural wealth slowly disappear before our eyes. Australia's experience this

summer is a stark reminder that it can happen in a blink.

Wildlife Conflicts vs Interactions

Hemantha Withanage, Centre for Environmental Justice, Sri Lanka

In 2019, Sri Lanka lost 409 elephants - almost 85% of them killed by human activities. Poisoning, 'Hakka Pattas' (a home-made bomb that blows up inside the mouth of the elephant), train accidents, electrification and shooting are common methods used. Meanwhile, over 101 humans were also killed in wildlife encounters in the same year. Monkeys, peacocks, wild boar have become problems in many places. They are not invasive species, but they have lost natural habitats due to human activities.

In the deliberations of Contact Group 2 yesterday, some countries argued that the term WILDLIFE INTERACTIONS is better than WILDLIFE CONFLICTS. The existing text in the Zero Draft states;

"Enhance the sustainable use of wild species providing, by 2030, benefits, including enhanced nutrition, food security and livelihoods for at least [X million] people, especially for the most vulnerable, and reduce humanwildlife conflict by [X%]."

I wonder whether the term interactions can explain the human wildlife conflicts in Sri Lanka.

Sri Lankan authorities and conservationists still argue about the number of elephants in Sri Lanka. It could be little more than 5000. The destruction of the natural habitats of elephants for infrastructure development, mismanagement of wildlife habitats and increasing human population are some of the factors behind conflicts. In most cases, humans have encroached on those habitats thus increasing human-wildlife conflicts. This may not be the case for some countries where wildlife has already been destroyed decades or centuries But in many developing countries where ago. considerable wildlife habitats remain, such conflicts are a serious issue. In some countries, the populations of certain species may have actually increased due to lack of predatory species or the extermination of predators by humans. These are potential conflicts which may perhaps be described as interactions.

The failure of coexistence in Sustainable Landscapes often results in conflicts. If the new global biodiversity framework aims to resolve human- wildlife conflicts, the above target needs to capture both conflicts and interactions between human populations and other species.

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