

OPINION

An era of delivery, not promises

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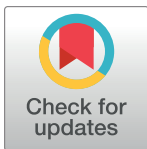
Suddenly, here we are. Thirty years later. But I will take you back to the beginning, in 1992. That year, the United Nations organized the Conference on Environment and Development in Rio de Janeiro, where I live now. I was 12 years old and lived in another town, but I still remember all the buzz around the meeting and how I felt excited about it. At my parents' house in Belo Horizonte, an old sticker with a globe and "UN Earth Summit" written in is still fixed in what used to be my wardrobe.

The "Earth Summit" had many outstanding achievements, notably the creation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). It also proposed an audacious program aiming to achieve over-all sustainable development in the 21st century, called Agenda 21. Those three initiatives established a new blueprint for acting on environmental and development issues that sparked international cooperation and development policy. For example, the Paris Agreement came from the 21st UNFCCC Conference of the Parties (COP) in Paris. From the CBD COP10 in Nagoya came the Aichi Biodiversity Targets. Both agreements proposed an action plan to fight the climate and biodiversity crises, respectively.

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 as the UN subsidiary body for assessing the science related to climatic issues. After 1992, the IPCC was also designated to offer specific scientific and technical matters from the UNFCCC. Within the CBD, the UN also established a Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA), to provide timely support on biodiversity matters. Later, in 2012, 94 governments created the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). This intergovernmental body assesses the state of biodiversity and the ecosystem services to society in response to requests from decision-makers.

The latest reports from the IPCC [1] and IPBES [2] indicate the urgency to act against the climate and biodiversity crises. In 2021, other reports from the United Nations [3], the UK Government [4], and the Swiss Re Institute [5], underscored that urgency with pessimistic projections about the future. Unless we embrace new ways of production and consumption, make a fast transition to clean energy systems, and protect and recover nature, our economy, livelihood, and health are vulnerable and in great danger.

This situation is why the 2021 COP26 climate negotiations held in Glasgow were crucial. Countries committed to put forward stronger 2030 emissions-reduction targets and reach net-zero emissions by 2050 to limit global warming to 1.5 degrees Celsius. Other major achievements of COP26 were the commitment of more than 100 world leaders to end and reverse deforestation by 2030. Brazil, my home country, where large swathes of the Amazon rainforest have been cut down recently, was among the signatories. Over 100 countries also signed a commitment to cut 30% of methane emissions by 2030.

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These actions are vital to stabilizing climate change. Although cutting methane will reduce only about 0.3 degrees Celsius by 2040 [6] from our 1.5-degree budget given by the IPCC, we need all the help we can get. Regarding deforestation, things are even clearer. Trees absorb very significant amounts of carbon dioxide—the primary cause of global warming—which makes ending deforestation crucial in the fight against climate change.

Some of the apparent shortcomings of COP26 relate to the difficulty in creating engagement and momentum to fully phase out coal power. Currently, coal is still the single most significant contributor to climate change. Although progress has been made in reducing its use, it still produced about 37% of the world's electricity in 2019 [7]. Further, financial support and money transfer schemes to foster transformative changes were left to be discussed in the next COP in Egypt. In many ways, postponing the discussion was frustrating, and several countries were dismayed at the end of COP26.

Just as important as the negotiations held in Glasgow will be those happening during the Kunming (China) COP15 of the CBD in April 2022, where Parties will agree on the final version of the Post-2020 Global Biodiversity Framework (GBF). The framework is a roadmap for biodiversity conservation for the coming decade and beyond. It will supersede the 2010 Aichi Targets that have largely gone unmet according to the 5th Global Biodiversity Outlook published by the CBD [8].

In 2021, the IPBES and the IPCC published a co-sponsored report on biodiversity and climate change [9], pointing out common solutions to fight these issues. The Brazilian Platform on Biodiversity and Ecosystem Services (BPBES; see Scarano et al. [10]) had produced a similar report one year earlier for Brazil [11]. The most promising solutions are ecosystem protection and restoration. Restoration, particularly, is a win-win answer that offers resilience for nature to flourish, captures carbon from the atmosphere, creates new markets and value chains, and generates green jobs bringing social and environmental impact that will last for generations. The means of implementation and monetary resources will also play a significant role in the GBF. We need to scale up and speed up the implementation of numerous actions to live in harmony with nature by 2050, as aspired to in the agreement.

Sixteen years after the Rio 92 conference, I received my Ph.D. in ecology. After that, I focused my research on conservation science, the effects of climate change on biodiversity, and the potential solutions to the issue. I have been engaged with IPBES endeavors, participated in CBD open-ended working group meetings, and co-authored hundreds of papers and reports on how to address climate change and halt biodiversity loss. I could never imagine how impactful a UN Conference could have been to a 12-year-old kid, as much as any environmental cause.

We have reached an era of delivery, not promises. Now it is time for governments, private and financial sectors, and civil society—supported by science—to step up and take action to address the climate and biodiversity crises we face. We need innovation, commitment, nature protection and recovery, and all the available resources brought to bear. Only then can we rest our hope in a stabilized climate trajectory and prospering biodiversity to give us the best chance for a safer future.

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