



One Earth Article: “Achieving a Nature- and People-Positive future”

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For biodiversity to thrive, conservation efforts must be ‘Nature and People Positive’, expert study finds

Stockholm and Nairobi, 5 December 2022

Despite decades of increasing investment in conservation, ‘bending the curve’ of biodiversity decline has not succeeded. Scientists argue that stronger outcomes for biodiversity conservation can be attained if conservation actions are combined with justice measures to tackle the underlying causes of decline.

In a new expert study published in the journal *One Earth*, an international team of scientists from the [Earth Commission](#), convened by [Future Earth](#), say that efforts to meet new biodiversity targets and goals for the next three decades risk repeating past failures unless three factors are addressed in campaigning efforts and practice: *focused attention to direct and indirect drivers of decline; unrealistic biodiversity response objectives and timelines, and failure to address fundamental inequities of past and current conservation and sharing of nature’s benefits.*

Lead author and Earth Commissioner David Obura from Coastal Oceans Research Development - Indian Ocean (CORDIO) East Africa says, “As the urgency and challenges in resolving the biodiversity crisis increase, actions to conserve biodiversity must broaden to address root causes and the entire scope of human – nature interactions.”

“We identify ambition and equity shortfalls in dominant conservation paradigms leading into final negotiations of the post-2020 Global Biodiversity Framework in December 2022. These gaps can fundamentally undermine long-term success for biodiversity conservation,” he continued.

The article identifies key drivers to be addressed, including inequality, increasing per capita consumption of resources in many countries, unsustainable technologies, investment and trade patterns, and values and governance systems that do not promote care for nature.

Co-author Diana Liverman highlights “the importance of transformations that address the drivers of biodiversity decline within a framework of justice that ensures wellbeing for all, including future generations and nature, and reduces pressure on the biosphere by reducing excess consumption and unsustainable trade and investments. Consumption footprints in richer countries consistently drive biodiversity loss in poorer countries”.

Solutions that avoid trade-offs between wellbeing and conservation should be a priority. Many proposals on mitigating impacts and conservation emphasize the importance of minimizing drivers to halt losses, in order to maximize gains, the authors argue.

The authors state that whilst ‘stretch targets’ can play an important role in motivating action on difficult issues, if decadal targets in 2030 fail to be met, as occurred in 2020, this can undermine the actions and commitments needed to achieve success in more realistic time frames. The 22 targets contained in the draft Global Biodiversity Framework cut across most of the areas in which action is needed, so setting realistic targets and outcomes for achievement may be essential to build and maintain the commitment to achieve them.

To meet these multiple challenges, the research team apply an emerging framework of ‘safe and just Earth System Boundaries’ that integrate quantification of intact and semi-intact (ie. altered, but still with high function) nature with justice criteria for all humans.

They identify six sets of actions aligned with the conceptual framework of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), concluding this can support the conservation community and society at large to engage with the deeper societal transformations needed for a safe and just future.

1. Reduce and reverse direct and indirect drivers causing nature’s decline
2. Halt and reverse biodiversity loss (i.e. ‘bend the curve’ of decline)
3. Restore/regenerate biodiversity to a net positive state, to a safe buffer above the Earth system boundary
4. Raise minimum wellbeing to secure each person’s fair share of the global biodiversity commons
5. Eliminate over- consumption and excesses associated with accumulation of capital
6. Uphold and respect the rights, responsibilities and agency of all, in the present and future

Co-author and Earth Commission Co-Chair Joyeeta Gupta says, “We point out that from an Earth System Boundaries perspective that holistic changes to address root causes of biodiversity decline

and inequalities are needed. By incorporating natural and social sciences ('safe and just') our findings assure the maintenance and thriving of biodiversity, and social equity needs."

"The stakes are higher than ever. We are facing unprecedented extinction rates. A healthy biosphere is essential to support life and healthy societies. The goals for the next decade of biodiversity conservation need to consider a just future for all communities - present and future - within Earth system boundaries." says Wendy Broadgate, Global Hub Director (Sweden) for Future Earth and Executive Director of the Earth Commission.

This new research comes ahead of an associated Earth Commission report due out in early 2023 that will outline a range of 'Earth System Boundaries' (ESBs) to safeguard a stable and resilient planet and underpin the setting of science-based targets for businesses, cities and governments.

"Safe and just Earth system boundaries provide scientific support for the necessity of halting biodiversity loss and conserving nature as a strategy to ensure a stable planet. Staying within those boundaries will improve the chances for a just future for all people", says Professor Johan Rockström, co-chair of the Earth Commission and Director of the Potsdam Institute for Climate Impact Research.

The Earth Commission is the scientific cornerstone of the Global Commons Alliance.

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Contextualising this paper for COP15

[Messaging explainer document](#)

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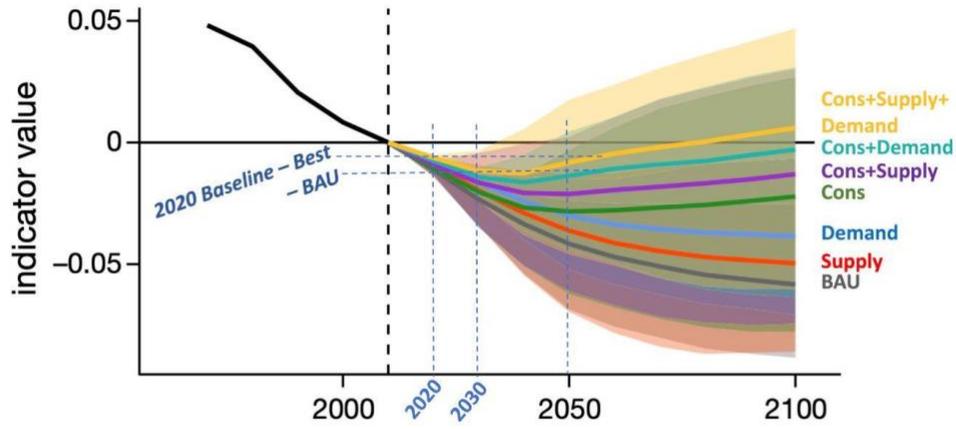
NOTES TO EDITORS

[The Earth Commission](#) is the first holistic attempt to scientifically define and quantify a safe and just corridor for people and planet, avoiding crossing irreversible tipping points. The Commission is hosted by [Future Earth](#), the world's largest network of sustainability scientists, and is the scientific cornerstone of the [Global Commons Alliance](#), a sponsored project of Rockefeller Philanthropy Advisors with support from Oak Foundation, MAVA, Porticus, Gordon and Betty Moore Foundation, Herlin Foundation and the Global Environment Facility. The Commission is also supported by the Global Challenges Foundation. Additional support for this paper was provided by the Norwegian Agency for Development Cooperation (Norad) and by the Swedish Research Council for Sustainable Development (FORMAS). The Commission is chaired by Prof. Dahe Qin (Chinese Academy of Sciences, China), Prof. Joyeeta Gupta (University of Amsterdam, Netherlands) and Prof. Johan Rockström (Potsdam Institute for Climate Impact Research, Germany).

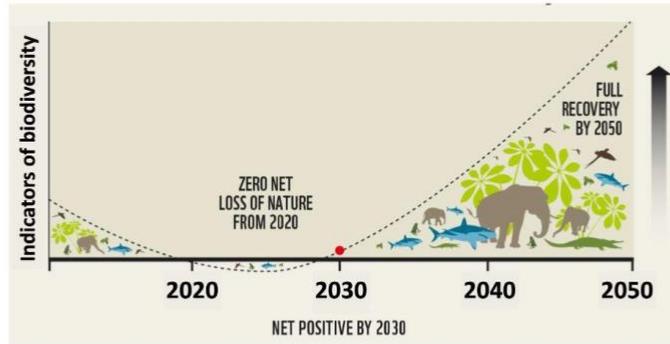
[Future Earth](#) is a global network of scientists, researchers, and innovators collaborating for a more sustainable planet. Our mission is to advance research in support of transformations to global sustainability. Future Earth hosts the Earth Commission and its scientific secretariat.

Figures and captions from the paper

A



B



C

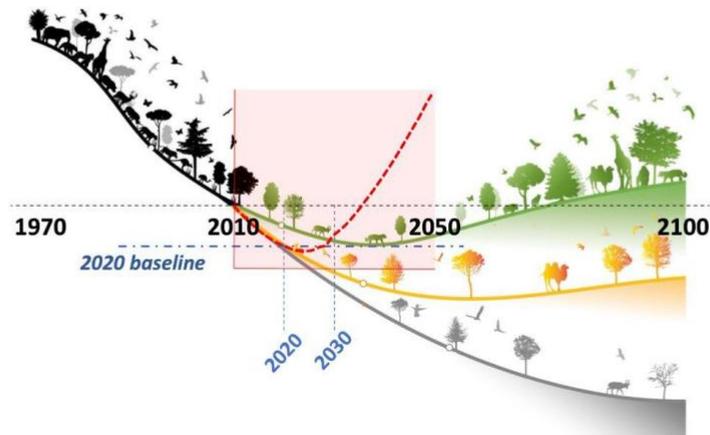


Figure 1. “Bending the curve” scenarios for potential outcomes of biodiversity

(A) The original figure in Leclere et al. 2020²⁴ shows modeled trajectories for one biodiversity indicator, mean species abundance. Scenarios shown are the baseline (BAU, business as usual), three individual actions (Cons, conservation; Demand, demand-side [consumption], Supply, supply side [production]) and then combining conservation with the others singly, then altogether.

(B) Biodiversity recovery curve as illustrated in the nature-positive campaign.³³

(C) Illustration of selected biodiversity recovery curves for BAU (gray), conservation only (yellow), and integrated scenarios (green) from (A). The dashed red curve and red axes/shaded box superimpose the axes extent and “nature-positive” curve in (B).

In (A) and (C), blue dotted lines show 2020 and 2030 on the x axis and relevant 2020 biodiversity base- lines on the y axis.

Note that x axes are on different time scales: (A) and (C), 1970–2100; (B), 2010–2050. Figure sources: (A) is reprinted with permission from Nature Publishing Group, License 5437030407382; (B) is from <https://www.naturepositive.org/>; and (C) is from <https://www.eci.ox.ac.uk/news/2020/0911-bending-the-curve.html>.

Graphical Abstract (on following page)

