

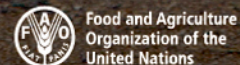


#IPBES7

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Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services



The IPBES Global assessment of biodiversity and ecosystem services

A major undertaking:

- 3 years
- 500 scientists
- 6 chapters (1,800 pages)
- 1 summary for policymakers
- 15,000 publications
- 20,000 comments received: in-depth peer review

IPBES-7:

- Hosted by France at UNESCO
- 29 Apr-4 May 2019, Paris
- 150 Governments represented
- 800 participants
- 45 hours of negotiation

Part of an important sequence toward 2020:

- G7 Environment (4-6 May, Metz, France)
- Scientific basis for the post 2020 biodiversity framework (COP 15, Nov. 2020)



Climate change has large impacts on biodiversity



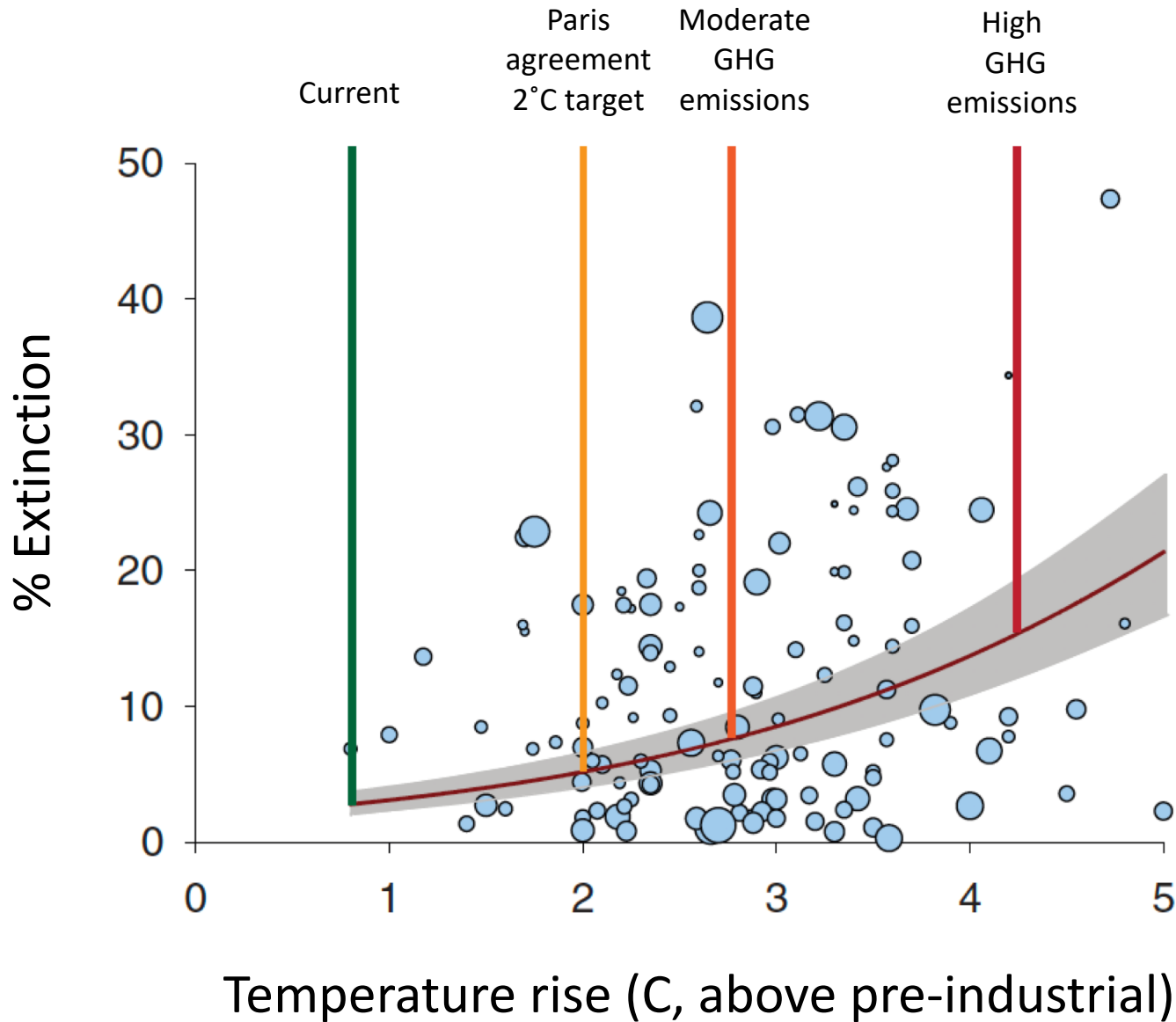
“Climate change is ... increasingly exacerbating the impact of other drivers on nature and human well-being [such as]...

... widespread [and accelerating] impacts on many aspects of biodiversity, including species distributions, phenology, population dynamics, community structure and ecosystem function.

Climate change is projected to become increasingly important as a direct driver of changes in nature and its contributions to people in the next decades.

- Even for global warming of 1.5°C to 2°C, the majority of terrestrial species ranges are projected to shrink profoundly.
- A synthesis of many studies estimates that the fraction of species at risk of climate-related extinction is 5 per cent at 2°C warming, rising to 16 per cent at 4.3°C warming.”

Climate change impacts on biodiversity



Biodiversity conservation goals and climate mitigation and adaptation goals can go hand-in-hand



“Land-based climate change mitigation activities can be effective and support conservation goals. Nature-based solutions [such as bioenergy, reforestation and afforestation] with safeguards are estimated to provide 37 per cent of climate change mitigation until 2030 needed to meet 2°C goals with likely co-benefits for biodiversity.

Scenarios that include substantial shifts towards sustainable management of resource exploitation and land use, market reform, globally equitable and moderate animal protein consumption and reduction of food waste and losses result in low loss or even recovery of biodiversity [and low greenhouse gas emissions].

Reductions in the diversity of cultivated crops, crop wild relatives and domesticated breeds mean that agroecosystems are less resilient against future climate change, pests and pathogens.”

Protecting natural ecosystems and restoration



- Halting of the conversion of natural terrestrial ecosystems and restoring degraded ecosystems could make significant contributions to climate mitigation.
- Protection of ecosystems, especially forests and coastal ecosystems, is a cost effective means of climate mitigation.
- Contributions from afforestation, reforestation, avoided deforestation and improved forest management = 0.4 to 3.8 PgC/yr.

*Global carbon budget (2000-2009): 7.8 PgC/yr = emissions from fossil fuel and cement;
1.0 PgC/yr = emissions due to land use change; 2.4 PgC/yr = terrestrial sequestration*

Some climate mitigation and adaptation actions could have detrimental effects on biodiversity

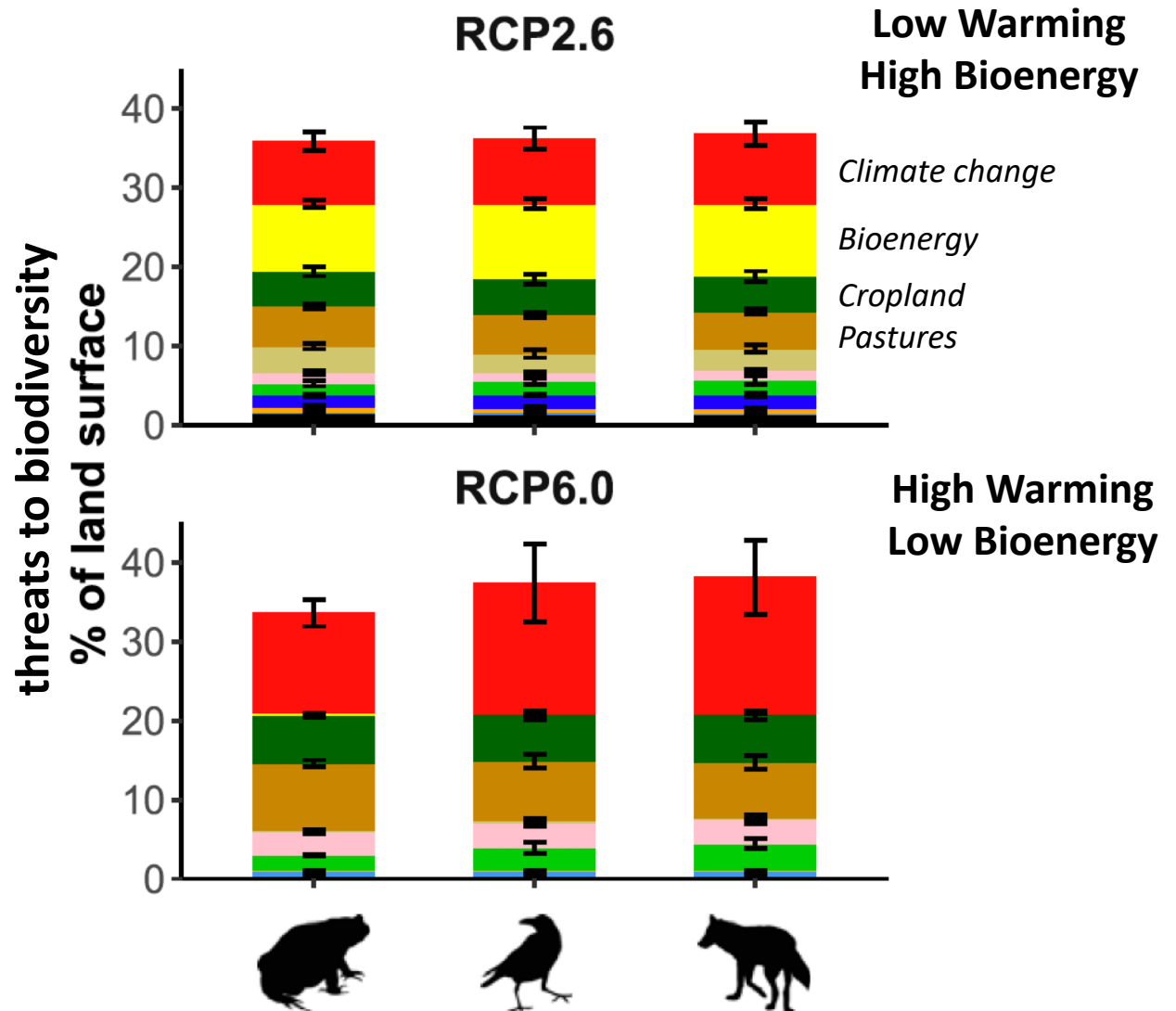


“Large-scale deployment of intensive bioenergy plantations, including monocultures, replacing natural forests and subsistence farmlands, will likely have negative impacts on biodiversity and can threaten food and water security as well as local livelihoods, including by intensifying social conflict.

The biodiversity and environmental impact of large-scale afforestation and reforestation depends to a large degree on where these occur (prior vegetation cover, state of degradation), and the tree species planted.

Some climate change mitigation programmes have had negative impacts on indigenous peoples and local communities.”

IPBES and IPCC assessments warn against the overreliance on bioenergy and afforestation as a land-based climate change mitigation strategies





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