

Tree-planting and land pledges would need area bigger than US, report estimates

Countries have promised 1.2bn hectares in total of new forests and restored land to help curb climate change



A mangrove tree-planting project in Aceh in Indonesia, among the few countries to make progress in halting deforestation © AFP/Getty Images

Camilla Hodgson YESTERDAY

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Climate pledges made by countries worldwide are “dangerously overreliant” on tree planting and land restoration that would require an area greater than the size of the US and risked sparking conflict, a study has concluded.

The assessment of the national climate plans submitted by nearly 200 nations to the UN found they would require a total of 1.2bn hectares of land for nature-based carbon removal activities, such as tree planting.

The strategy was not only slow to implement but could create conflict by displacing farmland and putting climate and food security objectives at odds, said the report, compiled by more than 20 researchers led by the University of Melbourne's Climate Futures initiative.

Countries were turning to land-based solutions instead of doing "the hard work of steeply reducing emissions from fossil fuels, decarbonising food systems and stopping the destruction of forests and other ecosystems", said Kate Dooley, the lead author.

"Faced with a global land squeeze, we must think carefully about how we use each and every plot of land," she added, in a report that comes just days before the UN COP27 climate summit in Egypt, where food and land use is on the agenda.

Global land area, excluding ice and barren rock, is estimated at [13bn hectares](#).

The report concluded that 166 countries plus the EU bloc had stated intentions to plant trees on 633mn hectares, including single-species plantations, which would drive up competition for the space with industries such as agriculture. Many nations had issued targets for their own land, but in some cases the commitments were vague.

Another 551mn hectares of degraded land would be restored, a practice that "holds more promise for climate and biodiversity and poses fewer threats to other dimensions of sustainability", researchers said.

Reforestation has become popular among governments, companies and investors looking for ways to offset their carbon dioxide emissions. Many carbon offsets, which are used by buyers to compensate for pollution, are generated by unregulated tree-planting schemes.

Last week, the UN said many countries were planning to use a new carbon credit system, the rules of which were finalised at last year's COP26 meeting, to help meet their national decarbonisation goals.

The researchers said cutting emissions as quickly as possible, including making food systems more sustainable, was required, rather than relying on longer processes for carbon removal.

Newly planted trees take years to absorb significant quantities of carbon and would

not achieve the reductions needed by 2030 to curb global warming, they said.

A separate study reported that the global deforestation rate fell 6.3 per cent in 2021 compared with the 2018-20 period, largely thanks to progress made by Indonesia and Malaysia.

But the report from Forest Declaration Assessment, an independent, civil society-led initiative, said the rate remained too slow to meet the UN pledge to halt deforestation by 2030, which requires a drop of around 10 per cent annually.

“Multiple streams of data show that the world is not on track to achieve our commitments to protect forests. We are quickly moving toward another round of hollow commitments and vanished forests,” said David Gibbs, a forests researcher at the World Resources Institute.

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