

researchers confirmed that countries could use SEEA to report 34 of the 147 Aichi target indicators and 21 of the 230 SDG target indicators. This is an important start, but also indicates how much needs to be done before more goals and targets can be reported using the SEEA framework – an opportunity which researchers must not pass up.

Measuring and reporting numerical targets, although vital, is not the whole story. If the world is to understand why the Aichi targets failed – and improve on them – it must assess the broader obstacles.

One is the historical tension between development and the environment – and the expectation of poorer countries that they should be able to develop, just as richer countries did. There is also a perception that new environmental standards will hold them back. No one can contest their case for developing, but, considering the state of the planet, their concerns need to be met through greener development. They need support to provide their citizens with basic amenities – such as clean water, nutrition and power – in a way that is sustainable and protects future generations. This means making significant changes to how economic decisions are made.

No contest

Usually, in any contest between industrial growth and the preservation of species and ecosystems, growth comes out on top. Biodiversity is rarely allowed to stop or delay a new airport runway or power plant. If a wetland needs to be concreted over to make way for a housing development, in many countries it has little chance of being protected, even though losing the wetland means sacrificing the services it provides to people – such as wildlife habitats and flood defences. These services are rarely quantified.

Fortunately, researchers and policymakers globally are taking a stronger interest in valuing biodiversity's contribution to economies and to societies. IPBES is deep in a project that will advise countries on the many ways to value biodiversity; a report is due to be presented next year. And last year, the UK Treasury launched its own independent review, chaired by the economist Partha Dasgupta of the University of Cambridge, that is due to report in time for the biodiversity conference in China.

We know that working in an economic and financial system that places little value on the natural world will make it difficult to meet goals in biodiversity and sustainable development. That's why it is prudent to tackle smaller aspects of the system – at least for now. At the same time, it's imperative that the new biodiversity goals find synergies and avoid conflicts with the Paris climate agreement and the SDGs, neither of which existed a decade ago.

The road to the Kunming convention will be long and complicated. This is inevitable, both because life on Earth is itself beautifully complex, with so many global systems influencing biodiversity, and because the outcomes matter. Humanity's future depends on our ability to protect the planet. Greater awareness of threats to the natural world – perhaps an intangible impact of the Aichi targets – has created a moment ripe for action. The challenge will be to keep the devil in the detail from derailing the process itself.

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The final countdown

The United Kingdom's Research Excellence Framework might turn out to be the last.

It was the day most UK academics were dreading. On Monday 17 February, funding agencies fired the starting gun on the next Research Excellence Framework (REF 2021), the United Kingdom's system for evaluating research quality.

Universities have until 27 November to submit their researchers' outputs to the REF. These will then be graded by review panels on a scale of 1 to 4 – the highest score meaning that the work is deemed “world leading” in its originality, significance and rigour.

A lot is riding on the outcome because funders use the results to allocate around £2 billion (US\$2.6 billion) in annual research funding to university departments. Most institutions will want to see their academics graded in the top two bands, because lower-performing departments are unlikely to get much money at all.

The exercise is valuable in providing public accountability for research spending while protecting universities' financial autonomy. But many researchers and research managers are wondering whether REF 2021 could be the last.

Many would not mourn the REF's demise. By coincidence, from 20 February thousands of UK academics will be on strike for 14 days, calling for better pay and more-secure pensions. The constant monitoring of performance that comes with research evaluation is also mentioned by academics as a source of stress and anxiety.

The REF is also not cheap to administer – the 2014 exercise cost around £246 million. And as with most indices, the REF's overlords keep having to make changes to prevent it from being gamed. In the past, departments were able to achieve high scores by submitting outputs from a fraction of their best-performing staff – something that is no longer allowed.

Universities that obtain the most REF-based funding are concentrated in London and southeast England, and this has fuelled arguments that the metric's funding formula helps to reinforce the UK's regional imbalance. That alone could be an argument for radical reform from a government looking to level up funding to other parts of the United Kingdom.

That said, the REF's critics need to be careful what they wish for, because the framework protects money that universities rely on to pay salaries and to keep the lights on. The government of Prime Minister Boris Johnson is also looking to cut funding from publicly funded bodies that have operated largely autonomously from the state – including the national broadcaster, the BBC. Moreover, proposals for research funding reforms are widely expected this year.

A bonfire of the REF might well appeal to many, but not if the outcome leads to cuts, or reduced autonomy for institutions. There could be a wiser option: adjust the REF's funding formula so that money for the best work is distributed more fairly across the United Kingdom.