Correspondence

Forests: time series to guide restoration

Reforestation to mitigate climate change will be a global commitment during the United Nations Decade of Ecosystem Restoration (2021–30). Given the unprecedented financial investment required, land managers, policymakers and other stakeholders need the best available data to understand, plan and manage forest restoration (see S. L. Lewis *et al. Nature* **568**, 25–28; 2019). We now have the tools for generating such data.

Satellite time series of Earth observation data provide objective, spatially explicit information on forest recovery over large areas (see J. C. White *et al. Remote Sens. Environ.* **194**, 303–321; 2017). These baseline data on the potential for natural regeneration at a given location can be integrated with data from ground plots, or from airborne laser scanning, to create a framework for characterizing forest recovery trends retrospectively, and for planning restoration efforts (see D. R. A. Almeida *et al. Forest Ecol. Manage.* **438**, 34–43; 2019).

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Forests: regrow with locals' participation

In calling for the restoration of more 'natural' forest to improve carbon sequestration (see *Nature* **568**, 25–28; 2019), Simon Lewis and colleagues should pay greater heed to the millions of people living in forest landscapes — many of whom are not Indigenous peoples. The needs, rights and governance arrangements of all these residents should be taken into account when drawing up such reforestation plans.

Tropical land can be cheap, as Lewis *et al.* note, often because the rights of its inhabitants are not properly recognized. In our view, rural populations need to be adequately represented to avoid the risk of harmful policies being introduced. The authors recommend that richer countries pay for more tropical forest (as happens already under the United Nations' REDD+ programme of forest management and conservation), but they should bear in mind the many problems associated with such payments (J. Börner *et al. World Dev.* **96**, 359–374; 2017).

We need a better understanding of how human use and governance arrangements of forests can affect biodiversity and carbon storage. Involving local people in landscape management could help them to achieve positive social and ecological outcomes (see, for example, J. A. Oldekop *et al. Nature Sustain.* **2**, 421–428; 2019).

We do not need more 'natural' forests, as Lewis and colleagues define them. We need more 'social' forests, regenerated through the support and participation of their residents.

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Catalogue of nudges for conservation

A report released last month catalogues a behavioural-science toolkit for conservationists (see go.nature.com/3iurm7w). It draws on examples that have delivered substantial behavioural shifts in other sectors. We urge conservation researchers to design ways of testing its recommendations.

Conserving wild species and their habitats requires more than good biology. Enduring solutions also hinge on people changing their behaviour — altering how we manage natural resources, adopting more sustainable consumption, and making investment decisions that are less environmentally damaging. Conservationists trying to encourage such changes still rely mainly on education, financial incentives and regulation.

However, a growing body of behavioural-science research shows that people's responses to these conventional approaches are influenced by decision-making contexts, by social convention and by idiosyncratic biases (see C. R. Sunstein and L. A. Reisch *Harv. Environ. Law Rev.* **38**, 127–158; 2014). Explicitly recognizing such factors can help to deliver beneficial behavioural change in low-cost, innovative ways. For example, altering default options has increased organ donation and markedly improved personal savings plans. Applications to nature conservation are scarce (see H. Byerly *et al. Front. Ecol. Environ.* **16**, 159–168; 2018).

In our view, conservation and behaviour-change experts need to collaborate to systematically identify and test ways of shifting behaviours to benefit conservation.

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Germline ban and human-rights law

I question the compatibility of the proposed international moratorium on clinical uses of human germline editing with the international human rights framework (see E. Lander *et al. Nature* **567**, 165–168; 2019).

The right to benefit from scientific progress, as set out in Article 15 of the International Covenant on Economic, Social and Cultural Rights (see go.nature.com/2veedkn), means that member states must "respect the freedom indispensable for scientific research". By default, biomedical research — arguably including clinical studies involving edited germline cells — is therefore permitted.

States can modify the default rule, but only according to the general principles of international law — in particular, the parameters outlined in Article 4 of the covenant. The result is that a moratorium can be imposed only if it is "determined by law", is "compatible with the nature" of the rights recognized in the covenant, and is intended "solely for the purpose of promoting the general welfare in a democratic society".

This means that restrictions to clinical research that are well established and clearly aimed at protecting the welfare of specific individuals, such as the need for research pre-approval and oversight, and for informed consent from research participants, are compatible with human-rights standards.

I believe that the proposed moratorium, by contrast, is of doubtful utility in promoting general welfare, given the potential of clinical research to prevent genetically transmitted disease.

In my view, basing policy on transparency and accountability (see go.nature.com/2vefryh) would be more promising and better aligned with the human-rights framework.

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CORRECTION

In the Correspondence by L. P. da Silva and V. A. Mata (*Nature* **569**, 192; 2019), it was incorrectly stated that Spain's Andalusian government ended night-time suction harvesting of olives this year. So far, it has only recommended that the practice be stopped.