

THE UNIVERSITY of EDINBURGH

# Edinburgh Research Explorer

## Social considerations are crucial to success in implementing the 30x30 global conservation target

**Citation for published version:** Sandbrook, CG, Albury-Smith, S, Allan, JR, Bhola, N, Bingham, HC, Brockington, D, Byaruhanga, AB, Fajardo, J, Fitzsimons, J, Franks, P, Fleischman, F, Frechette, A, Kakuyo, K, Kaptoyo, E, Kuemmerle, T, Nanatongo Kalunda, P, Nuvunga, M, O'Donnell, B, Onyai, F, Pfeifer, M, Pritchard, R, Ramos, A, Rao, M, Ryan, C, Shyamsundar, P, Tauli, J, Mwesigye Tumusiime, D, Vilaça, M, Watmough, G, Wordsell, T & Zaehringer, JG 2023, 'Social considerations are crucial to success in implementing the 30×30 global conservation target', *Nature Ecology and Evolution*. https://doi.org/10.1038/s41559-023-02048-2

### **Digital Object Identifier (DOI):**

10.1038/s41559-023-02048-2

#### Link:

Link to publication record in Edinburgh Research Explorer

**Document Version:** Peer reviewed version

Published In: Nature Ecology and Evolution

#### **General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

#### Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



#### Social considerations are crucial to success in implementing the 30x30 global conservation target

Chris Sandbrook, Department of Geography, University of Cambridge, Cambridge, UK\*

Shenique Albury-Smith, The Nature Conservancy, Caribbean Division, Nassau, Bahamas

James R. Allan, Independent researcher

Nina Bhola, UN Environment Programme World Conservation Monitoring Centre, Cambridge, UK

Heather C. Bingham, UN Environment Programme World Conservation Monitoring Centre, Cambridge, UK

Dan Brockington, Institut de Ciència i Tecnologia Ambientals, Universitat Autònoma de Barcelona, ICREA, Barcelona, Spain

Achilles B. Byaruhanga, Nature Uganda, Kampala, Uganda

Javier Fajardo, UN Environment Programme World Conservation Monitoring Centre, Cambridge, UK

James Fitzsimons, The Nature Conservancy, Carlton, VIC, Australia; School of Life and Environmental Sciences, Deakin University, Burwood VIC, Australia

Phil Franks, International Institute for Environment and Development, Edinburgh, UK

Forrest Fleischman, Department of Forest Resources, University of Minnesota, USA

Alain Frechette, Rights and Resources Initiative, Montreal, Canada

Kagumaho Kakuyo, Board of Trustees, Uganda Wildlife Authority, Kampala, Uganda

Edna Kaptoyo, Pawanka Fund, Puerto Cabezas, Nicaragua

Tobias Kuemmerle, Geography Department, Humboldt-University of Berlin, Berlin, Germany

Pauline Nantongo Kalunda, Environmental Conservation Trust of Uganda, Kampala, Uganda

Milagre Nuvunga, Micaia Foundation, Chimoio, Mozambique

Brian O'Donnell, Campaign for Nature, Durango, Colorado, USA

Fred Onyai, National Environment Management Authority, Kampala, Uganda

Marion Pfeifer, School of Natural and Environmental Sciences, Newcastle University, UK

Rose Pritchard, Global Development Institute, University of Manchester, Manchester, UK

Ameyali Ramos, IUCN Commission on Environment, Economic and Social Policy

Madhu Rao, IUCN World Commission on Protected Areas, Gland, Switzerland

Casey M. Ryan, School of GeoSciences, University of Edinburgh, Edinburgh, UK

Priya Shyamsundar, The Nature Conservancy, USA

Josefa Tauli, Global Youth Biodiversity Network

David Mwesigye Tumusiime, Makerere University Biological Field Station and Department of Environmental Management, Makerere University, Kampala, Uganda

Mônica Vilaça, The Nature Conservancy and Doctorate Program in Sociology, Universidade Federal da Paraíba, João Pessoa, Brazil

Gary R. Watmough, School of Geosciences, University of Edinburgh, Edinburgh, UK; Novel Data Ecosystems for Sustainability, International Institute of Applied Systems Analysis

Thomas Worsdell, Amazon Frontlines, Ecuador; IUCN CEESP Human Wellbeing & Sustainable Livelihoods theme

Julie G. Zäehringer, Wyss Academy for Nature, Centre for Development and Environment & Institute of Geography, University of Bern, Bern, Switzerland

\*Chris Sandbrook is the corresponding author. His email address is cgs21@cam.ac.uk

Following intense negotiation over several years, the Convention on Biological Diversity's Kunming-Montreal Global Biodiversity Framework<sup>1</sup>, adopted in December 2022, includes an ambitious target for area-based conservation as part of the global effort to halt and reverse biodiversity loss. Target 3 of the Framework aims to increase the global coverage of protected areas and Other Effective Areabased Conservation Measures (OECMs) to at least 30 per cent by 2030 (sometimes called '30x30'), such that this increase delivers benefits for biodiversity and human society while "recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories"<sup>1</sup>. We seek to emphasise that achieving Target 3 requires new knowledge about the social implications of different scenarios by which it might be implemented. Generating this knowledge will require innovative collaboration across disciplines and sectors.

Target 3 has the potential to be transformative for the long term future of nature and the benefits it provides to people. However, as might be expected for a global target, the exact wording allows diverse interpretations of how it might be implemented in different contexts. For example, the text of Target 3 gives a broad specification of where area-based conservation should take place ("at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services ... through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures"). An approach emphasising protection of the most possible species would produce a very different set of protected and conserved areas to one emphasising delivery of benefits to people<sup>2</sup>. Similarly, the target does not specify how the 30% should break down in terms of the area under different governance arrangements, or how strict the rules governing human presence and activities in protected and conserved areas should be.

Given the ambiguity in its wording, Target 3 could be 'achieved' through multiple possible approaches. Options range from the large-scale recognition of Indigenous and traditional territories and lands as contributing to conservation outcomes (with minimal or no changes in existing human activity) through to an expanded and upgraded network of strict protected areas (with potentially significant restrictions on human activities). Every possible approach to implementation will have different social, political and economic implications and resulting ecological outcomes, with different distributions of associated costs and benefits in time and space.

Understanding and predicting the social as well as the ecological implications of Target 3 will be essential for its effective delivery<sup>3</sup>, including its critical social safeguards ("[areas will be] equitably governed... recognizing indigenous and traditional territories, where applicable... recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories."). It is well known that area-based conservation can have a wide range of social impacts, both positive and negative<sup>4,5</sup>. However, at present there are only limited assessments of the socialecological implications of expanding area-based conservation to 30x30 under different implementation scenarios. Existing studies have investigated the number of people currently living in areas that could be included in scaled-up area-based conservation sites<sup>6,7</sup>, the potential impacts of losing agricultural land to conservation<sup>8</sup>, the uneven distribution of costs of implementing 30x30 between economically richer and poorer countries<sup>9</sup>, and which areas are critical for delivering benefits to people<sup>2</sup>. These are important contributions, but decision-makers at all levels will require much more detailed analysis scrutinising the short- and long-term implications of different implementation scenarios (what, where, how) for specific groups of local people (disaggregated by poverty status, livelihoods, gender, vulnerability and other factors).

To achieve this goal we make the following recommendations. First, while global analyses are useful, Target 3 will be implemented at the national and sub-national level. In many countries this has already started. This calls for new place-based coalitions of researchers, communities, NGOs and (crucially) government actors who can co-develop relevant research questions and analyses to inform, test and adapt implementation strategies and National Biodiversity Strategy and Action Plans (NBSAPs). Second, comparative analyses of multiple countries representing different social and ecological conditions are needed to enable an assessment of different socio-political-economic factors that affect 30x30 implementation and enable the identification of broader lessons and hypotheses. This could inform policy and build cross-national partnerships that can be powerful in influencing country-specific decision-makers. Third, existing social, economic and political datasets can be leveraged at national and international scales and at low cost to understand the likely implications of different conservation actions. Where relevant data are not available, they should be collected alongside, or ideally before, implementation. This should involve local actors and institutions, to empower them to advocate for the reforms and changes they wish to see. Fourth, better social indicators (such as relating to rights, participation, justice or financing) are needed to monitor Target 3. There is an opportunity for these to be developed and then adopted as part of the Monitoring Framework for Target 3 at the next Convention on Biological Diversity's conference of the parties (COP16) in 2024. Finally, further research and support for political mobilisation is required to support the achievement of the Indigenous people and local community rights-based approach to conservation that is enshrined in the text of Target 3<sup>1</sup>.

These actions will require close collaboration between scholars and practitioners working from multiple disciplines, perspectives and scales, including those who have been historically under-represented in debates over area-based conservation. This will require humility and constructive dialogue between people who bring different values, priorities and professional incentives to conservation challenges<sup>10</sup>. The authors of this article are one such group working to address this challenge. We call on others to do the same.

#### References

- Convention on Biological Diversity (2022) https://www.cbd.int/article/cop15-final-text-kunmingmontreal-gbf-221222.
- 2. Chaplin-Kramer, R. et al. Nat Ecol Evol 7, 51–61 (2023).

- 3. Löfqvist, S. et al. Bioscience 1-15 https://doi.org/10.1093/biosci/biac099 (2022).
- 4. West, P., Igoe, J. & Brockington, D. Annual Review of Anthropology 35, 251–277 (2006).
- 5. Oldekop, J. A., et al. Conserv Biol 30, 133–141 (2016).
- 6. Schleicher, J. et al. Nat Sustain 2, 1094–1096 (2019).
- 7. Allan, J. R. et al. Science 376, 1094–1101 (2022).
- 8. Mehrabi, Z., Ellis, E. C. & Ramankutty, N. Nat Sustain 1, 409–412 (2018).
- 9. Waldron, A. et al. Preprint at https://doi.org/10.1101/2022.03.23.485429 (2022).
- 10. Sandbrook, C., et al. Nature Sust 2, 316–323 (2019).

#### Acknowledgements

This work resulted from the Science for Nature and People Partnership (SNAPP) Social Impacts of 30x30 Working Group. SNAPP is a partnership of The Nature Conservancy and the Wildlife Conservation Society. The work is a contribution to the Global Land Programme:

https://www.glp.earth.

#### **Competing interests statement**

The authors declare no competing interests.