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GOP26 declaration to halt forest loss: avoiding mistakes of the past

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To the Editor — World and industry leaders at the 26th UN Climate Change Conference of the Parties (COP26) asserted in their declaration on Forest and Land Use a commitment to “*halt and reverse forest loss and land degradation by 2030*”¹. Nothing less than decisive and coordinated global action is required as we near an apocalyptic future of environmental degradation, species extinction, and catastrophic climate change. With the recent acceleration in newly created global commitments and successes such as the achievement of Aichi Target 11 in 2021², we should nonetheless pause and reflect about the implications of such top-down pledges to conserve forests for indigenous peoples worldwide.

The COP26 declaration explicitly recognises the important role of forest-dwelling indigenous peoples who “*depend on forests for their livelihoods and have a key role in their stewardship*”¹. A group of high-income governments and private organisations pledged in parallel \$1.7bn in financial support for indigenous and local communities³. While these developments acknowledge the role of indigenous people in conservation, the true costs of forest conservation remain elusive and indigenous groups themselves have already critiqued their limited inclusion in the COP26 deliberations⁴⁻⁶.

Caution is also necessary in light of the long history and broad evidence base of conservation’s unintended consequences, and the increased potential for conflict as indigenous people are commonly found inhabiting forests that are also global carbon sink hotspots (Fig 1). Misunderstanding the realities and priorities of indigenous peoples—including land tenure rights,

governance autonomy, human dignity, material livelihood, and cultural production—has regularly pushed forest-dwelling communities into precarious existence and created perverse incentives that undermine forest conservation goals, for which affected communities have been sanctioned yet further. However, in most instances indigenous communities have inhabited forest areas long before they had been declared “protected” and their superior ability to manage their natural environment compared to top-down has been demonstrated repeatedly^{7,8}.

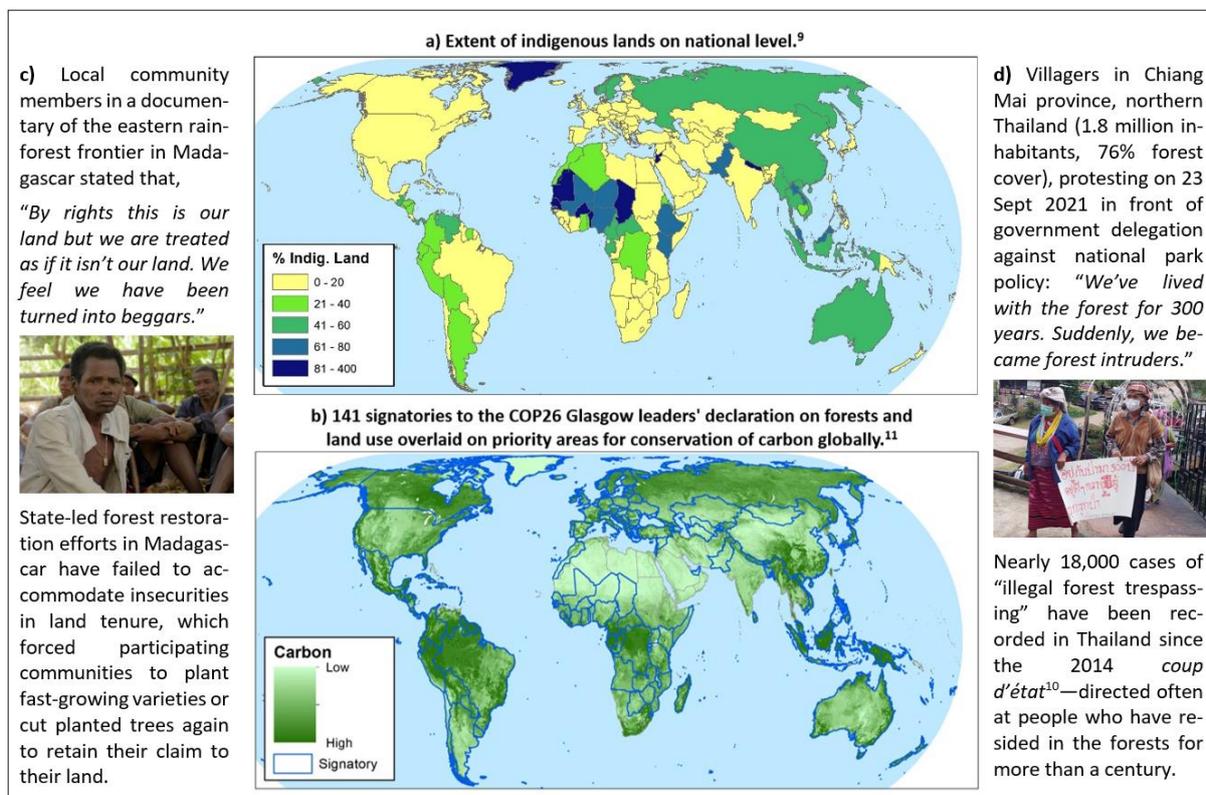


Fig. 1. Indigeneity remains central for global forest conservation but indigenous groups around the world have been experiencing dispossession and impoverishment from misdirected, politically appropriated conservation initiatives. Notes. Panel a: Spatial data from Garnett *et al.* (2018)¹¹ derived on publicly available data. Panel b: The declaration registered 141 signatories as of 12th November 2021 (6pm)¹. Panel c: Still image from the documentary “Voices from the forest” by the Forest4Climate&People project¹², used with permission. Panel d: Photo credit Prasit Leepreecha, used with permission.

Communities across Asia, South America and Africa routinely experience how conservation and reforestation efforts legitimise state control of ancestral lands, interfere with local (often sustainable) forest management practices, and can even create artificial pressures on land that accelerate deforestation and land degradation^{7,13-15}. Zoning, demarcation, exclusion, and the

surveillance of protected spaces have been facilitated by GPS mapping, satellite imagery, and remote sensing technologies, but their ability in discerning the socio-economic ramifications of conservation has remained extremely limited¹⁶.

For example, in Thailand, pressures from exclusionary land governance legitimised by satellite surveillance have intensified since the 2014 *coup d'État militaire* and the continued military dominance in Thai politics. In the same year as it seized power, the military government issued a forestry master plan that connected forest loss with notions like the “invasion” of state land¹⁷. Exclusion of “invaders” of protected areas have made it increasingly difficult for forest-dwelling communities to manage their environment and to uphold traditional forest-dependent livelihoods, like rotational agriculture, animal grazing, or religious rituals¹⁸.

The most recent global policy commitments and their acknowledgement of indigenous peoples are a step in the right direction. Key responses to this challenge have renewed calls to entrust governance and land rights to peoples who have inhabited protected forest areas for centuries and participatory mapping to support the land tenure. We support both, but neither has yet led to fundamental policy change. Notwithstanding questions of political feasibility and practical implementation of the proposals^{19,20}, evidence is scant that traditional policy tools such as incentives, compensation, and legal coercion are effective mechanisms to realise sustainable land use in contested areas like forest conservation²¹. State-led top-down actions indeed often provoke resistance rather than compliance with conservation rules and regulation^{4,13}. How can global commitments to safeguard forests then avoid such harms?

One key need is for locally grounded social impact assessments supported by GIS technology that assess the unintended and multidimensional livelihood implications of forest conservation²² including drivers of deforestation which originate from outside forces (i.e. industrial logging, market-based extraction of non-timber forest products, and also climate-change-induced migration). An online database platform with independent oversight can support the open

sharing of such a growing and systematically developed evidence base of the social and ecological consequences of conservation to legitimise courses of action and forest-based conservation solutions that safeguard indigenous people's livelihoods. Indigenous scholar activists and the social and behavioural sciences need to play a greater role in informing this process^{21,23-25}.

To successfully achieve our climate change mitigation goals through halting deforestation while safeguarding indigenous peoples' and forest-dwelling communities' dignity, rights, and livelihoods will require policy makers to be socially inclusive and ensuring that conservation initiatives learn from the long history and problematic history of forest conservation. It is important that the burden of addressing mitigating climate change should not fall on indigenous communities who are the least responsible for the current biodiversity and climate crises.

References

- 1 *Glasgow leaders' declaration on forests and land use*, <26th UN Climate Change Conference of the Parties (COP26) web page: <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>> (2021).
- 2 *Protected planet report 2020*, <<https://livereport.protectedplanet.net/>> (2021).
- 3 *COP26 IPLC forest tenure joint donor statement*, <26th UN Climate Change Conference of the Parties (COP26) web page: <https://ukcop26.org/cop26-iplc-forest-tenure-joint-donor-statement/>> (2021).
- 4 Rakotonarivo, O. S. *et al. World Dev* **94**, 478-491, doi:10.1016/j.worlddev.2017.02.009 (2017).
- 5 *Indigenous leaders to push for land tenure rights as climate solution at COP26*, <Mongabay News web page: <https://news.mongabay.com/2021/10/indigenous-leaders-to-push-for-land-tenure-rights-as-climate-solution-at-cop26/>> (2021).

- 6 *Rights groups warn COP26 rules on carbon markets leave indigenous people exposed*, <Thomson Reuters Foundation News page: <https://news.trust.org/item/20211112174257-6dtje/>> (2021).
- 7 Dawson, N. M. *et al. Ecology and Society* **26**, doi:10.5751/es-12625-260319 (2021).
- 8 Fa, J. E. *et al. Frontiers in Ecology and the Environment* **18**, 135-140, doi:10.1002/fee.2148 (2020).
- 9 Jung, M. *et al. Nature Ecology & Evolution*, doi:10.1038/s41559-021-01528-7 (2021).
- 10 สถิติป่าไม้ [*Forest statistics*], <Royal Forestry Department web page: <http://forestinfo.forest.go.th>> (2021).
- 11 Garnett, S. T. *et al. Nature Sustainability* **1**, 369-374, doi:10.1038/s41893-018-0100-6 (2018).
- 12 *Voices from the forest: putting local people at the heart of decisions about forest conservation [documentary]*, <<https://youtu.be/pQEIq0m-59M>> (2021).
- 13 Rakotonarivo, O. S., Bredahl Jacobsen, J., Poudyal, M., Rasoamanana, A. & Hockley, N. *Land Use Policy* **70**, 71-83, doi:10.1016/j.landusepol.2017.09.051 (2018).
- 14 Delang, C. O. *Society & Natural Resources* **15**, 483-501, doi:10.1080/08941920290069137 (2002).
- 15 Linh, H. T. P., Espagne, E., Lagrée, S. & Drogoul, A. *Inequalities and environmental changes in the Mekong region: a systematic mapping*. (Agence Française de Développement, Paris, 2021).
- 16 Roth, R. *Geoforum* **38**, 49-59, doi:10.1016/j.geoforum.2006.05.005 (2007).
- 17 ISOC. แผนแม่บท แก้ไขปัญหาการทำลายทรัพยากรป่าไม้ การบุกรุกที่ดินของรัฐ และการบริหารจัดการทรัพยากรธรรมชาติอย่างยั่งยืน [*Master Plan for Solutions to Forest Resource Destruction, Invasion Into State's Land and Sustainable Management of Natural Resources*]. (Internal Security Operations Command, Bangkok, 2014).

- 18 Phongchiewboon, A., Holland, J., Hytten, K. & Farrelly, T. *Journal of Political Ecology* **27**, 360-377, doi:10.2458/v27i1.23753 (2020).
- 19 COP26: Indonesia criticises 'unfair' deal to end deforestation, <BBC News page: <https://www.bbc.com/news/world-asia-59169547>> (2021).
- 20 Hockley, N., Mandimbiniaina, R. & Rakotonarivo, O. S. *Madagascar Conservation & Development* **13**, 3-5, doi:10.4314/mcd.v13i1.11 (2018).
- 21 Balmford, A. *et al.* *Biological Conservation* **261**, 109256, doi:10.1016/j.biocon.2021.109256 (2021).
- 22 Ang, M. L. E. *et al.* *Remote Sensing Applications: Society and Environment* **21**, 100458, doi:10.1016/j.rsase.2020.100458 (2021).
- 23 Leepreecha, P. *Journal of Southeast Asian Studies* **50**, 32-50, doi:10.1017/S0022463419000183 (2019).
- 24 Bennett, N. J. *et al.* *Biological Conservation* **205**, 93-108, doi:10.1016/j.biocon.2016.10.006 (2017).
- 25 Trakansuphakorn, P. *Southeast Asian Studies* **45**, 586-614, doi:10.20495/tak.45.4_586 (2008).