EVIDENCE FOR SUCCESS OF INDIGENOUS PEOPLES IN CONSERVATION

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IPs, LCs, and ADs conserve forests, ecosystems, and biodiversity effectively: Recognizing the traditional and customary lands of IPs, LCs, and ADs will substantially contribute to, or even exceed, area-based conservation targets
Rights-Based Conservation: The path to preserving Earth's biological and cultural diversity? Rights and Resources Initiative, November 2020
https://rightsandresources.org/publication/rights-based-conservation/
Executive Summary: https://rightsandresources.org/wp-content/uploads/2020/12/EN-30x30-Exec-Summary-Final-4.pdf

When Guatemala created a major reserve 30 years ago, environmentalists complained that too much land was entrusted to local people and not converted to parks. Now, the parks have been overrun by ranches linked to drug traffickers, while the community-run lands are well preserved.
Parks vs. People: In Guatemala, Communities Take Best Care of the Forest - by Fred Pearce, June 18, 2020
https://e360.yale.edu/features/parks-vs-people-in-guatemala-communities-take-best-care-of-the-forest

Collective property rights were found to have a strong effect on deforestation in the Brazilian Amazon. Specifically, the homologation of indigenous lands (i.e., granting of full property rights to Indigenous communities) was found to be responsible for a 66% decrease in deforestation in studied territories. The authors conclude that "obtaining full property rights is crucial to recognize indigenous peoples' original right to land and protected their territories from illegal deforestation" and that, "when implemented, indigenous property rights create sustainable areas in the Amazon rainforest."
Kathryn Baragwanath and Ella Bayi. "Collective property rights reduce deforestation in the Brazilian Amazon." PNAS 201917874. (2020), doi:10.1073/pnas.1917874117.

Study focused on 15,621 geographical areas in Canada, Brazil and Australia found that Indigenous-managed lands were more vertebrate species rich than existing protected areas in all three countries. Found that the size of an area and its geographical location did not affect species diversity. Suggests that land-management practices of many Indigenous communities are keeping species numbers high.
Richard Schuster, et al. "Vertebrate biodiversity on indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas." Environmental Science & Policy 101 (2019): 1-6.
https://files.wri.org/s3fs-public/securingrights-full-report-english.pdf

Restoring natural forests is the best way to remove atmospheric carbon - 2 Apr 2019
https://www.nature.com/articles/d41586-019-01026-8

Lovely, simple video from Survival showing NASA satellite imagery of IP titled lands with intact forests compared to other lands in Amazon
https://twitter.com/Survival/status/1108790730322051077 (2019)

Here, we describe the often overlooked role that resurgent Indigenous-led governance could have in driving rapid, socially just increases in conservation. Whereas Indigenous resurgence spans all aspects of governance, we focus on three aspects that highlight both the necessity and nascent potential of supporting resurgent Indigenous-led governance systems as they relate to conservation of lands and sea.
Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation - T Kyle A. Artellea,b,*, Melanie Zurba et al. (2019)
https://www.sciencedirect.com/science/article/pii/S0006320719307803

Nature better off with indigenous people, indicates global report - The findings of the first-ever Global Assessment Report on Biodiversity and Ecosystem Services are important in the light of the ongoing Supreme Court case against Forest Rights Act – 7 May 2019
https://www.downtoearth.org.in/news/wildlife-biodiversity/nature-better-off-with-indigenous-people-indicates-global-report-64359?fbclid=IwAR0X3I_2tIZIcH2VEXZoycar_o_BnPPsaOYYGYEJNzdgEAkfXe9v_5zDN4o

This descriptive study presents a discussion around conservation and Indigenous communities in Canada. The study describes that conservation attempts that ignore the rights and leadership of Indigenous groups will fail because Indigenous lands overlap with areas of high conservation value. The study also names that Indigenous communities are well-positioned to conduct monitoring and enforcement of management objectives; Guardian programs across Canada, wherein Indigenous nations patrol and monitor their territories, are shown to have a favorable social return on investment (this is measured to range from 10:1 to 20:1 in areas within British Columbia). Furthermore, biodiversity is higher or equal in state-recognized Indigenous lands as compared to state-led parks in Canada. The paper also cites “growing international evidence that Indigenous-managed areas are at east as effective as state-controlled protected areas in resisting deforestation and degradation from logging and other forms of land use.” The paper then presents suggestions for how state governments, researchers, practitioners, and funders concerned with conservation can take to support the ongoing resurgence of Indigenous governance.
Kyle A. Artelle, et al. "Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation." Biological Conservation 240 (2019): 108284.

New analysis reveals that Indigenous Peoples and local communities manage 300,000 million metric tons of carbon in their trees and soil - 9 Sept 2018
https://rightsandresources.org/en/carbon-rights-analysis-2018/#.XPaSu4hKiUl

Indigenous peoples defend Earth's biodiversity—but they're in danger – Nov 16 2018
https://www.nationalgeographic.com/environment/2018/11/can-indigenous-land-stewardship-protect-biodiversity-/

Understanding the scale, location and nature conservation values of the lands over which Indigenous Peoples exercise traditional rights is central to implementation of several global conservation and climate agreements. However, spatial information on Indigenous lands has never been aggregated globally. Here, using publicly available geospatial resources, we show that Indigenous Peoples manage or have tenure rights over at least ~38 million km2 in 87 countries or politically distinct areas on all inhabited continents. This represents over a quarter of the world's land surface, and intersects about 40% of all terrestrial protected areas and ecologically intact landscapes (for example, boreal and tropical primary forests, savannas and marshes). Our results add to growing evidence that recognizing Indigenous Peoples' rights to land, benefit sharing and institutions is essential to meeting local and global conservation goals. The geospatial analysis presented here indicates that collaborative partnerships involving conservation practitioners, Indigenous Peoples and governments would yield significant benefits for conservation of ecologically valuable landscapes, ecosystems and genes for future generations.
Garnett et al (2018) A spatial overview of the global importance of Indigenous lands for conservation. Nature Sustainability 1(7):369-374. DOI 10.1038/s41893-018-0100-6.
https://www.nature.com/articles/s41893-018-0100-6?fbclid=IwAR3En_ouJf5p1r22qCiO6q04mj1ko_48pOf4MPCr497KIsfIdEQmkHvBzBA

Cornered by Protected Areas – study / critique of fortress conservation with case studies, collaborative project by UNSR Tauli Corpuz, FPP, RF-UK, RRI etc. – June 2018
https://www.corneredbypas.com/

Study found that indigenous managed forests in Wisconsin, USA supported higher tree volume, higher rates of tree regeneration, more plant diversity, and fewer invasive species than nearby State-managed forests. Tribal forests exceed nontribal lands in measures of ecological function (biomass, carbon storage, and plant diversity) and the criteria commonly used to assess forest sustainability (sustained yields, forest stature, and diversity, natural regeneration success). Furthermore, they have done so for more than a century, demonstrating cultural resilience despite strong historical pressures to alter their management.
Donald M. Waller and Nicholas J. Reo. "First stewards: ecological outcomes of forest and wildlife stewardship by indigenous peoples of Wisconsin, USA." Ecology and Society (2018).

Found that Indigenous lands had higher species richness than non-Indigenous lands in an examination of Australia, Brazil, and Canada. More species overall and threatened species in particular were found to be distributed in Indigenous lands than in existing protected area or randomly selected sites under investigation.
Schuster, Richard, et al. "Biodiversity on Indigenous lands equals that in protected areas."

bioRxiv (2018): 321935.

Land titling for indigenous communities leads to forest protection, peer-reviewed study finds - 10 Apr 2017
https://news.mongabay.com/2017/04/land-titling-for-indigenous-communities-leads-to-forest-protection-peer-reviewed-study-finds/

Great overview of the evidence by Chris Lang – April 2017:
http://www.conservation-watch.org/2017/04/04/giving-land-rights-to-communities-stops-deforestation-heres-the-evidence/

Found that extending formal land titles to local communities in the Peruvian Amazon advanced forest conservation by reducing clearing by more than three-quarters and forest disturbance by two-thirds in the two-year period from the year the title is awarded. The study examined indigenous-community level longitudinal data and utilized satellite imaging to measure forest clearing and disturbance, and theorizes that forest clearing and disturbance was reduced due to the impact of land titles on ratcheting up formal and informal regulatory pressure.
Allen Blackman, et al. "Titling indigenous communities protects forests in the Peruvian Amazon." Proceedings of the National Academy of Sciences 114.16 (2017): 4123-4128.
Indigenous territories in the Peruvian Amazon were on average more effective that State-governed protected areas in avoiding forest deforestation and degradation
Judith Schleicher, et al. "Conservation performance of different conservation governance regimes in the Peruvian Amazon." Scientific reports 7.1 (2017): 1-10.

Found, based on analysis of 11 Latin American countries over the period of 1990-2010 through a number of multivariate statistical models, that extending forest areas designated for indigenous peoples/local communities promoted land-sparing. For example, deforestation was reportedly lower in indigenous-controlled lands as compared with neighboring privately owned lands in Bolivia. Furthermore, the article concludes that in many cases the exclusion of local communities from the management of the natural resource in question can result in poor monitoring and de facto open access conditions that are conductive to resource degradation.
M. Graziano Ceddia,, Ulrich Gunter, and Alexandre Corriveau-Bourque. "Land tenure and agricultural expansion in Latin America: The role of Indigenous Peoples' and local communities' forest rights." Global Environmental Change 35 (2015): 316-322.

A recent report released by World Resources Institute (WRI) and RRI contradicts Conservation International's message, and reveals the stunning environmental benefits that come from recognizing and protecting Indigenous Peoples' and local communities' rights to own and manage their ancestral lands. In the Brazilian Amazon, for instance, the deforestation rate is 11 times lower in community-managed forests than outside. In the Guatemalan Petén, it is 20 times lower, and in a part of the Mexican Yucatán, it is a staggering 350 times lower.
Caleb Stevens, et.al. "Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change." World Resources Institute (2014).

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.693.2467&rep=rep1&type=pdf

A study examining 292 protected areas and Indigenous peoples' lands in the Brazilian Amazon also found that "Indigenous lands appeared particularly effective at curbing high deforestation pressure, relative to both strictly protected and sustainable use areas" and concluded that these territories are "at least as effective [in protecting forests against deforestation] as strictly protected areas at moderate levels of pressure and more effective than any other protection type at high levels of pressure"
Christoph Nolte, et al. "Governance regime and location influence avoided deforestation success of protected areas in the Brazilian Amazon." Proceedings of the National Academy of Sciences 110.13 (2013): 4956-4961.

Porter-Bolland et al. (2012: 9), in a meta-analysis for the Center for International Forestry, reviewed data from seventy-three case studies in sixteen countries (mostly in Latin America) of community forests and strictly protected Category I–IV protected areas and concluded that "community managed forests may be at least as, if not more, effective in reducing deforestation as PAs [protected areas] at the pantropical scale."
Luciana Porter-Bolland, et al. "Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics." Forest ecology and management 268 (2012): 6-17.

Nelson and Chomitz (2011), in a study carried out by the World Bank Independent Evaluation Group, found that community-managed forests—and particularly forests controlled and managed by Indigenous peoples in Latin America—were much better protected against deforestation than national parks and other Category I–IV protected area. They concluded that "in Latin America, where indigenous areas can be identified, they are found to have extremely large impacts on reducing deforestation." Indeed, their data suggest that forests managed by Indigenous peoples are up to six times better protected against deforestation than strictly protected areas, even though Indigenous areas "are disproportionately located in areas of higher deforestation pressure."
The other study on forest loss undertaken by the World Bank Independent Evaluation Group (authored by Nelson and Chomitz) finds that some community-managed forests are located in areas with higher deforestation pressures than strict protected areas. Taking this into account, they find that community-managed forests are much more effective in reducing deforestation than strict protected areas (cf. summary table, p9). Where there is data, they find that forest areas managed and controlled by Indigenous Peoples are even more effective.
Nelson, Andrew, and Kenneth M. Chomitz. "Effectiveness of strict vs. multiple use protected areas in reducing tropical forest fires: a global analysis using matching methods." PloS one 6.8 (2011): e22722.
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0022722

In a study of eighty-four protected areas in Asia and Africa, Persha et al. (2011) found that community participation in forest governance was associated with higher biodiversity richness.

Lauren Persha, Arun Agrawal, and Ashwini Chhatre. "Social and ecological synergy: local rulemaking, forest livelihoods, and biodiversity conservation." science 331.6024 (2011): 1606-1608.

In a study of 80 forests commons in 10 countries across Asia, Africa, and Latin America, the research found that locally managed forested are associated with higher carbon storage. Local communities restrict their consumption of forest products when they own forest commons, thereby increasing carbon storage.
Ashwini Chhatre and Arun Agrawal. "Trade-offs and synergies between carbon storage and livelihood benefits from forest commons." Proceedings of the national Academy of sciences 106.42 (2009): 17667-17670.

Found that indigenous Maya community-managed forests in Mexico and Guatemala were as or more effective than State administered protected areas in avoiding deforestation.
David Barton Bray, et al. "Tropical deforestation, community forests, and protected areas in the Maya Forest." Ecology and Society 13.2 (2008).

Found that in the Central Yucatan Peninsular Region in Mexico, community forest management techniques contributed to lower annual deforestation rates in Zona Maya (ZM) as compared with La Montaña (LM). While in LM, agrarian policies drove much of the deforestation process, in ZM, forest conservation/maintenance was largely driven by local community forest institutions.
Edward A. Ellis and Luciana Porter-Bolland. "Is community-based forest management more effective than protected areas?: A comparison of land use/land cover change in two neighboring study areas of the Central Yucatan Peninsula, Mexico." Forest ecology and management 256.11 (2008): 1971-1983.

Indigenous reserves in the Brazilian Amazon—then numbering 361 and constituting 20 percent of all of the Brazilian Amazon—were more effective than state protected areas in preventing deforestation and burning, despite being more often situated on the edge of the “arc of deforestation” that marks the advancing colonization and deforestation fronts in the southern Amazon.
Daniel Nepstad, et al. "Inhibition of Amazon deforestation and fire by parks and indigenous lands." Conservation biology 20.1 (2006): 65-73.

One study (Hayes and Ostrom 2005; Hayes 2006), using standardized data from eleven countries in the Americas, South and Southeast Asia, and East Africa, compared eighty-seven community-managed forests with seventy- six protected areas. This study concluded that the “non-parks” were at least as effective in maintaining vegetation density as protected areas.
Tanya Hayes and Elinor Ostrom. "Conserving the world's forests: Are protected areas the only way." Ind. L. Rev. 38 (2005): 595.