Socioeconomic and environmental trade-offs in Amazonian Protected Areas and Indigenous Territories revealed by assessing competing land uses

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Between 2000 and 2010, Protected Areas in the Brazilian Amazon reduced deforestation by up to 82% compared to land used for agriculture and mining. Indigenous Territories were also highly effective and reduced deforestation by up to 83% during the same time.

Protected Areas did not reduce local incomes compared to agriculture and mining, but incomes were up to 36% lower in Indigenous Territories compared to other land uses.

Protected Areas are effective at achieving environmental protection and socioeconomic development simultaneously. However, although Indigenous Territories are highly effective for conservation, additional interventions are needed to ensure these communities are not further disadvantaged.

The problem
Meeting the UN’s Kunming-Montreal Global Biodiversity Framework’s target to protect 30% of the planet’s surface by 2030 requires rapid expansion of area-based conservation initiatives.

Establishing Indigenous Territories (ITs) can help meet this aim while also securing greater land rights than Protected Areas (PAs) can provide.

Understanding the environmental and socioeconomic outcomes of different area-based conservation initiatives is critical to ensure that trade-offs between conservation and local people’s needs are understood and effectively managed.

Providing policy makers with data on the outcomes of PAs and ITs relative to alternative economic activities is essential for environmentally sound and socially just conservation and development decision making.

We provide such data for the first time for the Brazilian Amazon in comparison to the region’s major alternative land-uses, agriculture and legal mining concessions.

Novel approach
We assess deforestation and socioeconomic outcomes (income, inequality, literacy and sanitation) of strict PAs, sustainable-use PAs and ITs between 2000-2010 compared to sparsely populated areas, agricultural land uses (from smallholders to large land holdings representative of large scale agri-businesses) and legal mining concessions across ~5500 census tracts in the Brazilian Legal Amazon.
Policy recommendations

Area-based conservation in the Brazilian Amazon can preserve forest cover and deliver socioeconomic development outcomes for local people that are comparable to economically focused alternative land uses.

Indigenous Territories are particularly effective at combatting deforestation. Efforts to return lands to Indigenous Peoples and Local Communities are ramping up in the wake of the new Global Biodiversity Framework and the Glasgow Declaration on Forests and Land Use.

Our analysis indicates that efforts to secure land rights must be accompanied by additional initiatives to ensure that these communities are not disadvantaged socio-economically, for example by removing access barriers to existing social protection programmes and other forms of support.
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**About Sustainable Forest Transitions**

Sustainable Forest Transitions examines how drivers of reforestation can benefit the environment and local communities, while improving the design and evaluation of forest-sector interventions. The project was selected by the European Research Council (ERC) and funded by UK Research and Innovation (UKRI) under grant number EP/X023222/1.

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