Tropentag, September 16-18, 2026, hybrid conference

"Towards multi-functional agro-ecosystems
promoting climate resilient futures"

Shaping future forest conservation in latin america: A systematic review of potential other effective area-based measures

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Abstract

Achieving global biodiversity goals can be supported by recognising conservation contributions from areas beyond Protected Areas (PAs), including those identified as Other Effective Area-Based Conservation Measures (OECMs). Focusing on Latin America, this systematic literature review synthesizes 93 publications that assess the effectiveness of area-based conservation measures outside formal PA systems in reducing deforestation. First, we identify and classify area-based measures that may qualify as potential OECMs into six types based on their conservation objectives and characteristics: (i) Strict Biodiversity Conservation Areas, (ii) Set-Aside Areas for Ecosystem Services, (iii) Indigenous Territories, (iv) Local Community Territories, (v) Managed Sustainable-Use Areas, and (vi) Ancillary Conservation Areas. Second, we synthesize the available evidence on their effectiveness in reducing deforestation. Indigenous Territories are the most frequently evaluated, whereas Strict Biodiversity Conservation Areas have received relatively little attention. Methodologically, most evidence relies on non-experimental comparisons of forest-cover trends; quasi-experimental designs are less common but provide stronger causal inference of conservation effectiveness. Disaggregating outcomes by comparator type reveals important patterns: Indigenous Territories consistently show reduced deforestation relative to both PAs and non-PAs, while Local Communities' Territories generally outperform non-PAs but underperform compared with PAs. Set-Aside Areas for Ecosystem Services show predominantly negative outcomes, largely reflecting weak enforcement. Despite this growing evidence base, very few of these areas have been formally recognised as OECMs, highlighting a disconnect between available research and reporting under the Kunming–Montreal Global Biodiversity Framework. Bridging this gap will require stronger causal evidence, broader geographic coverage, and inclusive recognition processes that account for the governance rights of those who manage these territories.

Keywords: Area-based conservation, conservation effectiveness, deforestation, Indigenous Territories, Kunming–Montreal Global Biodiversity Framework, local communities, oECM, production landscapes

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