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Abstract

Increasing population pressure and poor resource management have led to the deforestation and resulting fragmentation of Brazil's Atlantic Forest, incurring costs on climate stability, water quality, and other ecosystem services essential to the well-being of local agricultural communities as well as the global community. Compliance with the Brazilian forest code would promote restoration but congruently convert a significant amount of the region's farmland, relegating many small-scale farmers to extreme poverty. The establishment of agroecology systems, including agroforestry, as a proposed mediation strategy to deforestation in the region provides an opportunity for a technical solution that could increase monetary returns for reforestation and buffer systems in the face of an unpredictable climatic future. The implementation of such agroecology systems on the appropriate scale, however, requires stakeholder participation in design and the characterization of the flow of ecosystem services and appropriate markets. This project seeks to identify the justification for land management practices between rural agroecological and conventional producers in relation to social, environmental, and economic characteristics and goals, and resultantly how cooperative management of systems may potentially bridge gaps between evidence and practice.